

1. Mhh . 1891.1

37(3)
April 1957

HARVARD MEDICAL *ALUMNI BULLETIN*



HARVARD UNIVERSITY
SCHOOLS OF MEDICINE AND PUBLIC HEALTH
LIBRARY
APR 17 1957

for the treatment of

- AMENORRHEA
- FUNCTIONAL UTERINE BLEEDING
- HABITUAL ABORTION
- LOBULAR HYPERPLASIA
- PREMENSTRUAL TENSION

"colprosterone"[®]

Vaginal Progesterone



More acceptable

Avoids pain and inconvenience of injection . . . insures better patient cooperation than any other dosage form.

More dependable

Response is more predictable than with oral, or buccal and sublingual therapy.

More economical

Cost is low in terms of greater patient benefits.

"Colprosterone" Vaginal Tablets—Brand of progesterone U.S.P. presented in a specially formulated base to insure maximum absorption and utilization.

Complete dosage regimens for above indications are outlined in descriptive literature. Write for your copy.

Supplied: No. 793—25 mg. tablets (silver foil). No. 794—50 mg. tablets (gold foil). Boxes of 30 and Combination Package of 15 tablets with applicator.

Each tablet is individually and hermetically sealed. Presented in strips of 3 units, detachable as required.

AYERST LABORATORIES • New York, N. Y. • Montreal, Canada



5614



FROM HERE...



...TO VITALITY

VISTABOLIC[®]

The Modern Alleotic*

Vistabolic is a new gerontotherapeutic preparation. It provides anti-stress, anabolic, and nutritional support, and speeds the geriatric patient to recovery from surgery, debilitating disease, fatigue, neurasthenia, and other stressful situations.

Each oral tablet provides:

Hydrocortisone 1.0 mg.
 Stenediol[®] (Methandriol) . . 10.0 mg.
 Bifactor[®] (Vitamin B₁₂ w/ Intrinsic Factor Concentrate) ½ U.S.P. Oral unit

Each cc provides:

Hydrocortisone acetate . . . 1.0 mg.
 Stenediol[®] (Methandriol) . . 10.0 mg.
 Vitamin B₁₂ activity (from Pernaemon[®], Liver Injection, U.S.P.) 20.0 mcg.

*Available in 10-cc vials and boxes of 30 tablets.
 Professional literature available on request.*

*Vistabolic is an alleotic, an alterative remedy aiding recovery from stress.

Organon INC.
ORANGE, N. J.



JOHN P. BOWLER '19
Hanover, New Hampshire. Dartmouth Medical School, 1915-1917. Professor of surgery, Dartmouth Medical School.



ARTHUR T. HERTIG '30
Boston, Massachusetts. Shattuck Professor of Pathological Anatomy and head of the department of pathology at Harvard Medical School.



GEORGE R. DUNLOP '31
Worcester, Massachusetts. Attending surgeon, Memorial Hospital, Worcester. Assistant clinical professor, Tufts Medical School.

Getting Out the Vote

The annual election this year for three new members of the Harvard Medical Alumni Council takes place in April. The six candidates for these three positions are pictured herein.

In 1955 only 30% of the Alumni voted in this balloting. In 1956 only 37% returned ballots. It may well be noted again, as it was last year in an editorial in the *Bulletin*, that 60% of our Alumni contributed to

the Alumni Fund—a curious contrast to the percentage of those voting!

Three of the ballots cast last year caught the eye: one ballot returned from Seattle, Washington, had written, under the instruction "Vote for not more than three," the statement "They all look O.K.," and was returned with no further marking.

A second ballot arrived, torn in half, mangled, smudged, a mere

shadow of its former self, correctly filled out with a cross (X) against three names and the accompanying apology, "Sorry, the children got to it first."

A third ballot arrived from Los Angeles one hour before the deadline. Inside the envelope lay the ballot, crisp, clean, unbent, unsmudged and completely *unmarked* and *unsigned*.

The Editors of the *Bulletin* beseech the Alumni to get out the vote, and thereby uphold the framework of democratic procedure!



GEORGE CRILE, JR. '33
Cleveland, Ohio. Head of the department of general surgery, Cleveland Clinic Foundation.



JOHN E. ADAMS '39
Berkeley, California. Chief of neurosurgery and head of the department at the University of California Medical School.



CHEVES McCORD SMYTHE '47
Charleston, South Carolina. Associate in medicine at the Medical College of South Carolina. Markle Scholar in Medical Science.



ALEVAIRE® aerosol in the home

in bronchiectasis—

*"Thick, yellow, solid sputum which had been expectorated with difficulty became thin, colorless and liquid sputum which was expectorated with ease and gradually diminished in volume. Labored breathing and insomnia, . . . soon were replaced by easy respiration and ability to enjoy normal restful sleep."**

CASE REPORT

A typical Alevaire case history—C. S., 31 year old male with bronchiectasis and sinusitis, had had pneumonia six times. He had a continuous thick purulent postnasal drip and thick, yellowish green sputum; he expectorated at least a cupful of sputum each morning on arising. The patient was weak and debilitated, with chills and low grade fever. Bronchograms revealed advanced bronchiectasis. Antibiotics, postural drainage and expectorant cough mixtures had not helped.

Alevaire therapy was begun with one hour of direct nasal inhalation every day. After the first treatment the patient expectorated a large amount of sputum and definitely breathed easier. The nasal passages began to open, and with subsequent treatments both the sinusitis and the bronchiectasis improved. He began to breathe easier through the nose and to expel bronchial secretions more readily. His appetite improved and he felt stronger.

At the end of fourteen days he was almost completely symptom free. Alevaire was continued each night for short periods at bedtime, and the patient remained completely free of symptoms except for a light morning expectoration.

*Miller, J.B., et al.: Ann. Allergy, 12:611, Sept.-Oct., 1954.

ALEVAIRE

has been dramatically effective in:

Alevaire is supplied in bottles of 60 cc. for intermittent therapy and in bottles of 500 cc. for continuous inhalation therapy.

Winthrop LABORATORIES
NEW YORK 18, N. Y. • WINDSOR, ONT.

- neonatal asphyxia (due to inhalation of amniotic fluid, mucus obstruction, atelectasis)
- croup • laryngitis • tracheobronchitis
- pertussis • pneumonia • bronchial asthma
- emphysema • bronchiectasis • lung abscess
- pneumoconiosis • smoke, kerosene poisoning
- poliomyelitis (respiratory complications)
- routine oxygen therapy • tracheotomy
- prevention of postoperative pulmonary complications

\$6000

Mutual Fund Plans For **INCOME**



Every day more and more prudent investors are talking about our \$6,000—*or more*—Mutual Fund *Income* Plans which feature...

- ▶ **DIVIDENDS** — up to 12 varying cash dividends each year.
- ▶ **DIVERSIFICATION** — an interest in 100 or more of America's leading corporations.
- ▶ **CONVENIENCE** — continuous, professional management of these securities for you.

To receive our suggestions on a planned mutual fund investment of \$6000—*or more*—just mail the coupon below.

KIDDER, PEABODY & CO.

FOUNDED 1865

Members New York and American Stock Exchanges

Uptown Office: 10 East 45th Street, New York 17 • MUrray Hill 2-7190

Please send your free report on a \$6,000—*or more*—mutual fund program which (within market risk limits) seeks:

☐ More Current Income

☐ Growth—future income

Name.....

Address.....

HM-4

Note: Information is for our guidance only and does not assure achievement of objective

EDITOR

JOHN R. BROOKS, '43B

ASSOCIATE EDITORS

A. CLIFFORD BARGER, '43A

CARL BRUNSTING, '57

ERNEST CRAIGE, '43A

J. ENGLEBERT DUNPHY, '33

JOSEPH GARLAND, '19

THEODORE H. INGALLS, '33

FRANZ J. INGELFINGER, '36

ROLF LIUM, '33

J. GORDON SCANNELL, '40

ROBERT S. SHAW, '45

RICHARD WARREN, '34

MARTHA WOODBURY DUNN

Assistant to the Editor

BUSINESS MANAGER

CURTIS PROUT, '41

25 SHATTUCK STREET

BOSTON 15, MASSACHUSETTS



ASSOCIATION OFFICERS

GEORGE P. DENNY, '13, *President*

RUSSEL H. PATTERSON, '18, *President-elect*

JOSEPH T. WEARN, '17, *Past-President*

RICHARD CAPPS, '31, *Vice-President*

JAMES H. JACKSON, '43A, *Secretary*

JOHN R. BROOKS, '43B, *Treasurer*

COUNCILLORS

GORDON A. DONALDSON, '35

MAXWELL FINLAND, '26

CLAUDE E. FORKNER, '26

JOSEPH GARLAND, '19

ROBERT J. GLASER, '43B

JOHN P. HUBBARD, '31

CHESTER M. JONES, '19

JOHN ROCK, '18

FIORINDO A. SIMEONE, '34

THOMAS H. LANMAN, '16

Director of Alumni Relations

MR. BARRETT WENDELL JR.

Executive Secretary

HARVARD MEDICAL ALUMNI BULLETIN

VOL. 31

APRIL 1957

NO. 3

Getting Out the Vote	2
A Rearrangement of the Curriculum in the Preclinical Years at Harvard	7
On Graduate Training in Automotive Medicine	12
Atoms in the Medical School	15
Editorial: Boards and Circles	18
This Way to the Side Show	20
Diagnosis Deferred: Philosophy of the First-Rate	25
Correspondence	26
Book Reviews	26
Inside H.M.S.: Palms Against the Morning	27
Internships, Class of 1957	31
The "Tranquil" Isles	34
Melville Harpoons a Doctor	37
Honors	39
Any Plans for Your Daughter?	41
Necrology	42
Alumni Notes	42



... the softness of fine flannel

... the long wear of fine worsted

Worsted Flannel Suits

There is real luxury in this fine quality

worsted flannel suit. It is woven of imported

Australian yarn with all the softness of

fine quality flannel plus the long wearing quality of an

excellent worsted. Your satisfaction for

wear, for style, for comfort is assured.

\$65



... smooth toe styling

... inside support and comfort

Bostonian Marshall

The Marshall is of selected brown mello calf with a heavy single sole, made with Softred flexible construction.

Most men like it for the way it takes a shine and keeps it. Inside support and comfort too.

\$19.95



Employees, professional and non-professional of all eleven affiliated hospitals,
are eligible for membership in the Coop.

A Rearrangement of the Curriculum

IN THE PRECLINICAL YEARS AT HARVARD

Manfred L. Karnovsky, Ph.D.

ASSISTANT PROFESSOR OF BIOLOGICAL CHEMISTRY, HARVARD MEDICAL SCHOOL

Expansion of knowledge constantly creates a need to develop new ways of conveying that knowledge to an oncoming generation. In no field is this more evident than in the field of Medicine, where research and investigation at both the basic and applied levels have resulted in the accumulation of an enormous body of new information. Medical schools in many parts of the world are attempting to find answers to the problem of imparting this and older knowledge, without merely adding to the weight of an already heavy curriculum. Several schools in the United States have been in the forefront of the exploration of new ways to educate medical students.

At Harvard Medical School reappraisals of the teaching program have frequently been made, and some three

Editor's Note: In view of Alumni interest in the teaching programs of the Medical School, Dr. Karnovsky was requested to prepare the present article on proposed changes in the curriculum for the first two years. The author served as Chairman of the *ad hoc* Committee on Curricular Arrangements for Preclinical Teaching and Integration with Clinical Teaching. The following members of the Staff, appointed by their respective academic departments, contributed to the work of the *ad hoc* Committee: A. Clifford Barger, Russell J. Barnett, Earle M. Chapman, Peter B. Dews, Louis K. Diamond, George E. Erikson, Don W. Fawcett, Howard A. Frank, Elwood Henneman, Avram S. Goldstein, Kurt J. Isselbacher, Edward H. Kass, William B. Kinter, Ernest Knobil, Boris Magasanik, Guido Majno, Donald G. McKay, Paul L. Munson, George Nichols, Jr. (who served as Secretary), Gardner C. Quarton, Albert E. Renold, F. Lee Rodkey, Emanuel Suter, Claude A. Villee, Jr., Leon P. Weiss. The members of the *ad hoc* Committee have labored mightily for the past three years. They have had the help of their several academic departments, of the Preclinical Council, of the Curriculum Committee and of other *ad hoc* groups appointed to explore special problems. Their proposals have been enthusiastically received by the Faculty of Medicine. As a result, the heads of the departments concerned are currently considering ways and means to put the suggested curricular rearrangements into operation next fall.

years ago the heads of the preclinical departments nominated a number of individuals to serve on an *ad hoc* Committee which was to hold discussions on the first two years at the Harvard Medical School, and to report its findings and suggestions. The original Committee, together with a number of additional members, has carried on its work during three different phases.

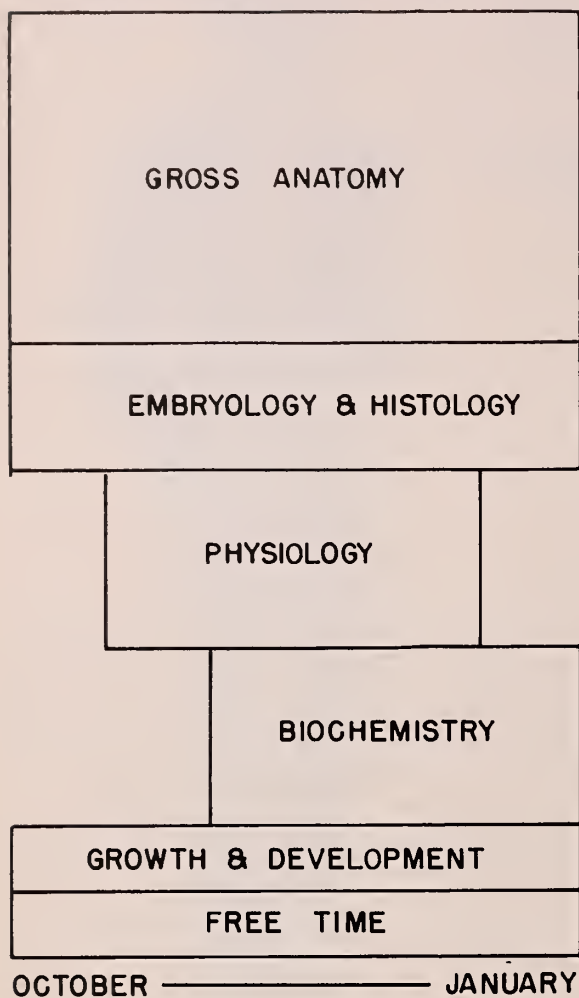
In the first phase of the study the present curriculum was analyzed course by course, and a series of meetings was designed for the purpose of acquainting the members of the Committee with the outlook, aims, program and problems of each Department. Those of the Committee who had graduated from Harvard Medical School were able to note many important improvements which have been introduced into the curriculum in recent years. However, it was equally apparent that further changes could be made to assist the student at Harvard to exploit to the fullest advantage the richness of his environment.

In the second phase, the Committee worked on the evolution of a course which it believed might represent the optimal educational format for the two preclinical years. The results of these efforts were presented to the Faculty in the spring of 1956, and were received with some enthusiasm. During the present (third) phase, the Committee was considerably enlarged so that the broadest possible spectrum of opinion could be represented, and the detailed aspects of implementing the two-year curriculum which had been devised were worked out. A report from this *ad hoc* Committee was brought to the Faculty in February, 1957, and was approved in principle.

The work of the Committee in its first two phases resulted in the formulation of a number of ideas which have served as a basis for all the later planning. It

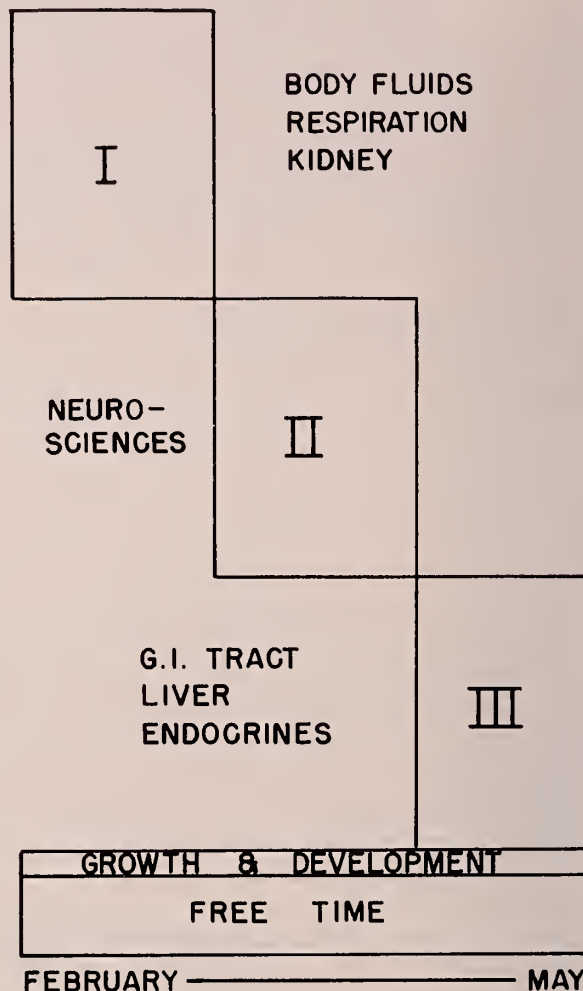
FIRST YEAR

PRESENTATION OF PRINCIPLES



FIRST SEMESTER

CORRELATIVE TEACHING



SECOND SEMESTER

Figure 1. *The Arrangement of Course Material in the First Year*

In each semester, the sequential arrangement of the course material is presented. The area of each block in each semester diagram represents the relative amount of time allocated to each subject. Comparisons of time allocated to topics may be made only within each separate semester diagram, but not between diagrams.

might be of interest to list some of these basic opinions, as follows:

(1) It was realized that in any discussions comparing the present curriculum with an ideal program, the numerous advantages of our present curriculum might receive less than their just due. The Committee was thus on the alert to maintain a reasonable balance between enthusiasm for a possible new venture and appreciation of an already proven achievement.

(2) It was believed that a greater degree of interdepartmental discussion and exchange of ideas than that presently enjoyed would be eminently desirable, especially among the younger teachers.

(3) The group felt that in several instances a rearrangement in the timing of the subject matter of the

present courses would be advantageous. It also felt that there are areas in which interdepartmental teaching could contribute enormously to the curriculum. However, it was considered to be of urgent importance *first* to offer the students a contact with the philosophy, methods and contributions of the separate established basic disciplines prior to attempting a unified approach to problems of human biology. The School is fortunate in having had an opportunity in the past five years of observing the operation of a unified program of teaching in the Basic Medical Sciences. This program has been offered in the Division of Medical Sciences, and aims at preparing students for the Ph.D. degree and for their careers in research and teaching. As an experiment, several medical students have been permitted

to take their first year in this program, thus providing valuable information on the possibilities of interdepartmental teaching for medical students.

(4) A decrease in the amount of subject matter didactically taught and a concomitant increase in the free time available to students was thought to be eminently desirable. In this regard, the Committee felt concern at the failure of our present program to bring the students to the libraries during the preclinical years. Any change in curriculum should have as one of its aims the encouragement of wider scientific reading by the students, the provision of adequate free time, and increased opportunities for individually selected studies.

(5) It was believed that a broader tutorial system than that which presently operates would be of considerable value—both in accelerating the orientation of the student and in helping him to use his free time advantageously.

(6) The Committee was unanimously of the opinion that any new curriculum in the preclinical years should rest squarely on strong individual departments. Although boundaries between the different Basic Medical Sciences have become less well-defined in recent years, it was felt that the best service to research and teaching in these Sciences would result from the active cooperation of strong Departments. The interplay of different approaches was felt to be more desirable than the loss of identity of the various disciplines.

(7) In a new curriculum, it was felt extremely important carefully to preserve the time available to the Faculty for research—the teacher who is actively engaged in research brings added life to his teaching.

With these considerations as a background, a course covering each of the first two years was designed. In each year the general approach was first, to establish a firm footing in each basic science, and later to apply the multi-discipline approach to a number of important problems of human biology. Further, the major emphasis in the first year was to be on the normal, and increasing attention would be turned to the abnormal and disease states during the second year.

The diagrams of *Figures 1* and *2* represent, in outline, the nature of the rearranged first and second years. Only the broad outlines of the rearrangements will be presented in this report. A detailed treatment of the various parts of the plan would be more germane after a year or two of operation.

THE FIRST YEAR

The Principles of Biochemistry and Physiology, as well as Gross Anatomy and an Introduction to Histology would comprise the first semester of the first year. Although the schedule for Gross Anatomy would not be greatly changed from that which presently exists, the approach and goals would be modified in accordance with the general perspective of the rearranged curriculum. Less Histology would be given in the first half-year than is now given in the first semester,

and the difference would be made up by the Histology offered as part of the correlative teaching in the second semester. It is believed that the teaching of Histology would contribute enormously to the unified part of the program, and conversely, should itself gain strength from the contribution of other disciplines. In particular, a good correlation of structure and function could be achieved.

The Principles of Biochemistry would aim at laying a solid general foundation in this discipline and would focus principally on enzymes, energy and intermediary metabolism. The Introduction to Physiology would have the same aim in view and would select a model around which to teach the principles of the discipline. "Circulation" has been suggested as one such model.

In the second semester, unified or interdepartmental teaching in the areas indicated in *Figure 1* would be offered. Each topic would be taught by a team, each member of which would be designated by his Department. Each team would decide the allocation of time and the selection of material in consultation with the various participating Departments. The Departments of Biochemistry, Physiology and Anatomy (Histology) would be responsible for the program, and it is planned that Gross Anatomy and the Biochemistry Laboratory should also take part. In particular, the role of Gross Anatomy in this part of the program could become of great importance, and this subject could itself be greatly enlivened through participation in the correlative teaching. It is believed that benefit would accrue from considering all aspects of a particular subject—"Respiration" for example—from the Anatomical, Physiological and Biochemical viewpoints at one time.

THE SECOND YEAR

The second year would follow, in principle, the pattern of the first year. Thus, the Principles of Pathology, Bacteriology and Pharmacology would start the year. The courses in Bacteriology and Pathology during this period would be correlated as much as possible. This would allow, among other considerations, a thorough coverage of the dynamic and morphologic aspects of immunological reactions and infectious diseases. After a firm footing has been obtained in these subjects, Parasitology and Chemotherapy would be introduced as interdepartmental areas. In the second semester, a unified course called "Mechanisms of Disease" and comprised of Special Pathology, Pathologic Physiology and elements of Medicine and Surgery, would be the main activity. Laboratory Diagnosis would be made an integral part of this major course.

The Committee envisages this course in the Mechanisms of Disease, which would occupy most of the time of the second semester of the second year, as a logical development of the second year course in Medicine, which has been evolved under Dr. Burwell's leadership, with its emphasis on pathologic physiology. The aim of the course would be to strengthen the link between

SECOND YEAR

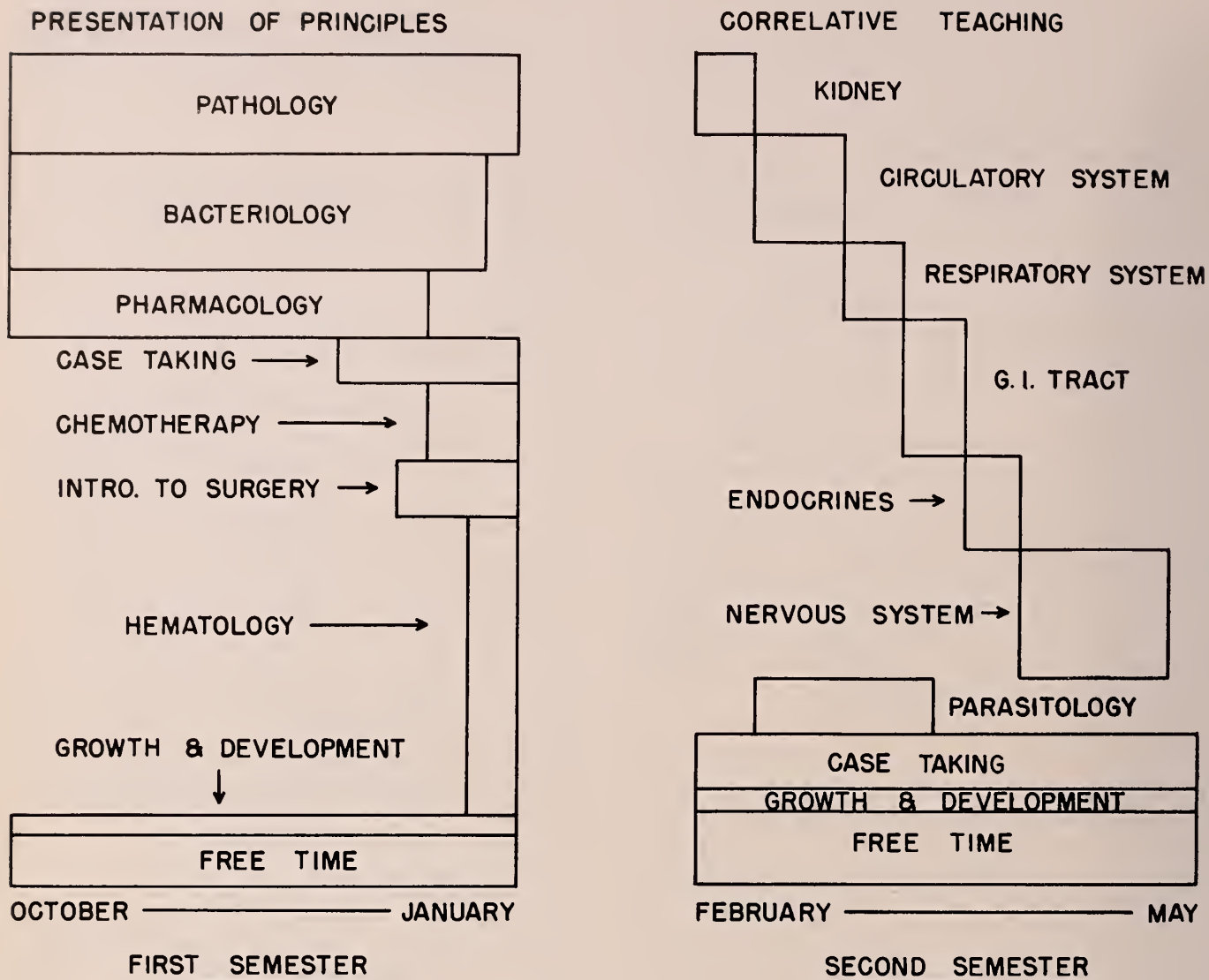


Figure 2. The Arrangement of Course Material in the Second Year

The diagrams are of the same nature as those of Figure 1. In the second semester, the correlative teaching consists of a large course in the Mechanisms of Disease, outlined in the text. The various systems will be treated as shown. Case Taking and Laboratory Diagnosis will be closely correlated with the discussion of diseases of the various systems. The section on hematology shown in the first semester is actually a part of the course in the Mechanisms of Disease—i.e., there is some overlap of the subject matter of the two semesters.

Pathology and Medicine by replacing some of the exercises in morphology with Experimental Pathology. To this course, also, Physiology, Biochemistry, Histology, Pharmacology and Bacteriology could all make an important contribution.

FREE TIME

A very important feature of these proposals is the inclusion of adequate free (unscheduled) time. The extent of this free time would increase throughout the period of two years—until finally, in the second semester of the second year, three full afternoons per week

would be available to the student (excluding Saturday afternoon). It is planned to offer a number of elective courses which the student might take during some of the time available, and to provide research opportunities for students in the many laboratories of the school. The tutorial system should, as has been mentioned, make it possible for each student to select an activity most suitable to his particular needs and interests.

“GROWTH AND DEVELOPMENT”

It will be noted that some time is allocated to a course called, for lack of a more suitable term, “Growth and

Development." This course would begin early, and would run throughout both years. It should include consideration of genetics and statistics, embryology, and somatic and psychic development from infancy through adolescence and adulthood. The problems of aging should also be discussed. Because of the breadth of such a course, it would have to be a collaborative enterprise including faculty members from the Basic Sciences, Obstetrics, Pediatrics and Psychiatry. In the first year, the course would encompass growth and normal development, including individual and social psychology. In the second year, a course in abnormal growth and development would be given.

The Committee felt that an approach to the whole process of growth and development, such as is outlined, has much to offer. A continuum between physiology and psychology, both normal and abnormal would be provided, and the possibility would exist for a discussion of all aspects of the problem in one unit. It might be mentioned that several members of the Committee who had been educated at the Harvard Medical School felt very strongly that such a course could be developed into a most important feature of our teaching.

THE TUTORIAL

The Committee believed that there is a need to provide the students with a broad and very active tutorial system. It envisaged recruitment of a number of tutors from interested members of the Faculty. It would be desirable to have about six students allocated to each tutor. The tutors could serve as advisers and counsellors, and could effectively assist in the orientation of students. Although it would be necessary to assign stu-

dents to tutors at the beginning of the year, an opportunity should be provided for the reassignment of any student to a tutor who might share a special interest.

It was felt that such a tutorial system would be especially helpful to the student who experiences difficulty in mastering the basic sciences. On the other hand, it would also provide for the student who is particularly interested in the basic sciences a better chance of delving deeply into some selected area. This would lead to a fortunate situation in the second semester of the second year, as has been mentioned, with regard to the disposition of free time and the selection of elective courses or research opportunities. Further, every student would be in close personal contact with some member of the Faculty at an early stage, a situation that could be of importance in reducing the anxiety felt by many medical students in their first year. It is interesting to note that a scheme similar to that considered by the Committee has recently been proposed by the medical students themselves.

CONCLUSION

This rearrangement of the curriculum cannot be considered as a radical departure. One of its chief merits is that it does not impose any great complexity of organization on the departments. The aim has been chiefly to provide a framework within which the departments can most successfully cooperate in the presentation of topics, when such cooperation might enhance the presentation. Further, since the plans are extremely flexible, it is anticipated that a continual evolution of the best ways of presenting the Basic Medical Sciences to our students will occur.



On Graduate Training in Automotive Medicine

Charles Huntington Harrison, '34

We are suffering from an over-specialization in hospital residency training programs. Many skills which are essential to doctors of all specialties are not touched upon. Matters such as the business side of medical practice, relationships with referring physicians and how to open a checking account at a bank are examples. We tend to assume that such things are naturally self-taught, but during his time in the hospital the doctor is in restricted contact with the outside world. It is as if he were on a ship making a sea voyage. He learns the things of importance aboard the ship, but when the voyage is over the many responsibilities of his further progress are too often handled in the clumsy fashion of Jack ashore.

One of the greatest needs of all is schooling in the technique of self-transportation. At the end of his residency the doctor finds that the automobile emerges as a formidable appurtenance of his daily life. He must see patients, attend rounds, conferences and operations in a variety of locations. Many decisions must be made. What kind of a car will he get? Will it be a small sports car? It has the advantage of economy and maneuverability, but the wife usually doesn't like it, and it cannot be used to accommodate furniture, babies, dogs, etc., in the yearly move to keep ahead of rapacious landlords. Will it be something

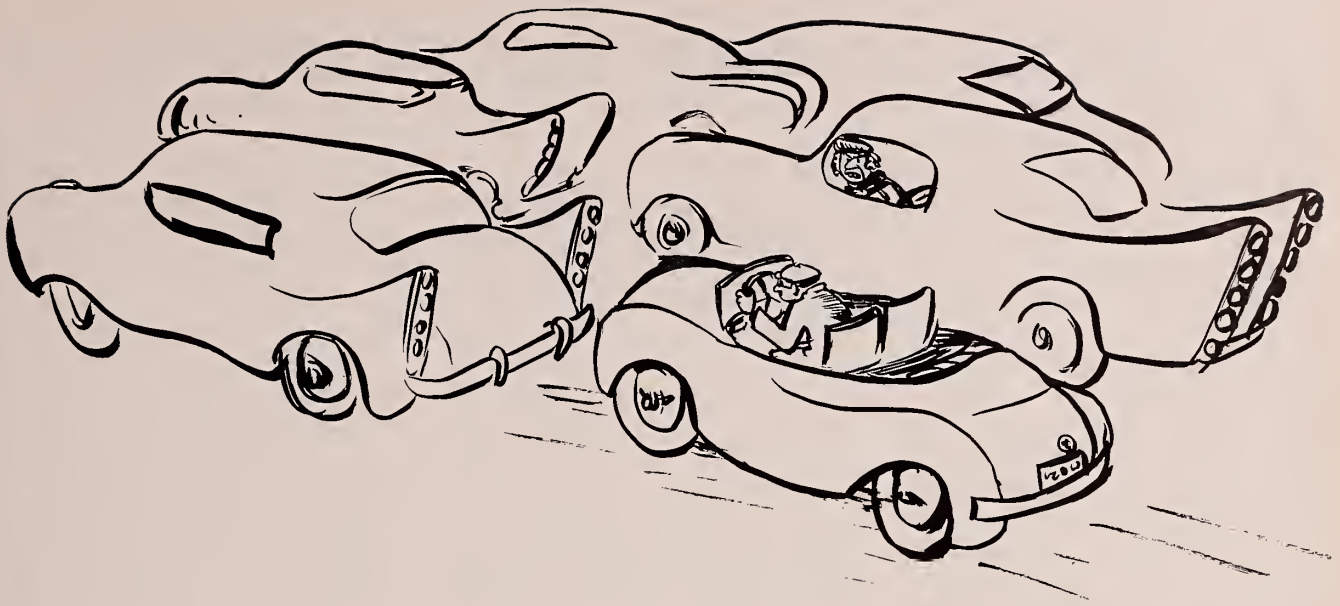
big and expensive, medium-sized, small, conservative, flashy, wagon, hardtop, convertible, truck, bus or jeep, new or secondhand?

The type of decision has plagued doctors for centuries. In former times it may have been even more difficult, since the choice of a horse, particularly a sound one, is fraught with more hazards than that of a car. And more importance, if possible, was put on appearance then than now. The doctor, for instance, was supposed to ride sidesaddle for reasons of dignity. Those were the

times when he wore a wig, carried a cane furnished with a vinaigrette to sniff in order to ward off the evil miasmas emitted by patients. He even affected a muff to keep his fingers soft, the better to feel the pulse.

Then came the carriage. Its importance with respect to prestige was monumental. One young doctor is said to have given evening singing lessons in disguise, another to have hired his carriage as a hack in the evening, himself being the coachman, that it might be owned in the daytime for the all-important pro-





fessional call. The secret of our coachman doctor was finally discovered by his forgetting the time of day and climbing in beside his fare one evening, a part of the tale which would be necessary even if it were not true.

But if the elegant carriage was necessary to meet urban competition it was misplaced in country practice. "Horse and Buggy Doctor" is an expression that has become part of the language. It represents a longing for the simplicity, the fortitude, the devotion of the days when our country was young. In its various undertones it still influences the decisions of many to select medicine for a profession.

A program of graduate training in automotive medicine could include many features. No one, for instance, has taught the salutary effect of driving on the doctor's mental processes. Decisions on patient treatment, arrangement of thoughts for teaching, can often be made while under its relaxing effect. There is a cadence to it, a privacy, and, above all, no telephone. Residencies should teach how to make best use of this time, and instruction should be given in how to combat such undesirable counter-influences as the frustration of the traffic circle, the effrontery of the construction area, the paroxysm of parking.

Instruction in escaping from the vortex of a circle should include, for example, the maneuver of charging, as if to ram, a fast-moving vehicle on the periphery. One must be taught in so doing to select one's adversary by noting the individual behind the wheel of the other car. A woman, preferably very young or very old, is the best choice. A middle-aged woman is unsatisfactory, since the members of this group are inclined to aggressiveness. A large dog is a hallmark of dashing determination, and a car containing one should be avoided, as should the teenage male and the truck or cab driver. If one is encircled by these he had better continue around the circle, if necessary several times, until an appropriate victim presents herself.

In avoiding a construction area it could be taught, for instance, that one should try to find a private way around. Although this may be longer, slower and rougher than the detour selected by the authorities, the time is well spent. The ego is inflated and one avoids coming under the influence of the inevitable and depressing individual with the red flag.

And take parking. Let us teach the academic approach, and emphasize that the triumph of finding a space may compensate for its difficulty of

accomplishment. We should teach the young to look upon it as a game in which one must make one's own rules. One may decide, for instance, that "No Parking Anytime," being more familiar and so more customarily violated, is safer than "No Parking This Side," which seems to connote a more specific prohibition. One must debate how faded a painted yellow curbstone must be before one will risk it, or how near to the corner, the hydrant, or the crosswalk may be safely chanced. Guidance should be given in how hard another car may be bumped when parking or unparking, and the young doctor must be instructed to look before bumping to see whether someone has left grandma dozing in the back seat. Although one usually receives nothing more than the most startled and terrified of glares from having overlooked this point, nevertheless in the game that one has created such an error necessitates a penalty.

Another section of the proposed course should be devoted to the display of insignia. The decision as to whether to pick a small green cross, or a large one, or one of the more ornate A.M.A. models, needs a trained mind. Even if one prefers the simple type one must think twice about purchasing it for fear of being thought to have done so out of

inability to afford the more ornate. Hospital parking permits on the car window carry distinction. Those of no more than two different hospitals, however, should be displayed. One teaching and one suburban institution make a good combination. Three or more indicate a "hospital trotter," an individual with an unseemly fervor for making contacts.

The student must come to realize that the prestige of the sticker, furthermore, is important to preserve. The power of distribution can become an important form of administrative barter. A hospital superintendent, once faced with confronting a staff member with a change of status to a less responsible post, found that the assignment of a better parking space extricated him from a ticklish situation. In another institution it is said the desirability of parking spaces was kept at such a height that a brilliant young surgeon turned down a lucrative professorship elsewhere, solely because he did not wish to give up the excellent space he had achieved by hard labor and good luck (the timely death of a senior staff member) at the home institution.

Another period could be devoted to advice about the things one should leave on display in one's car for

others to observe as they writhe by it in the parking space. These may be divided into three categories: household, recreational and professional.

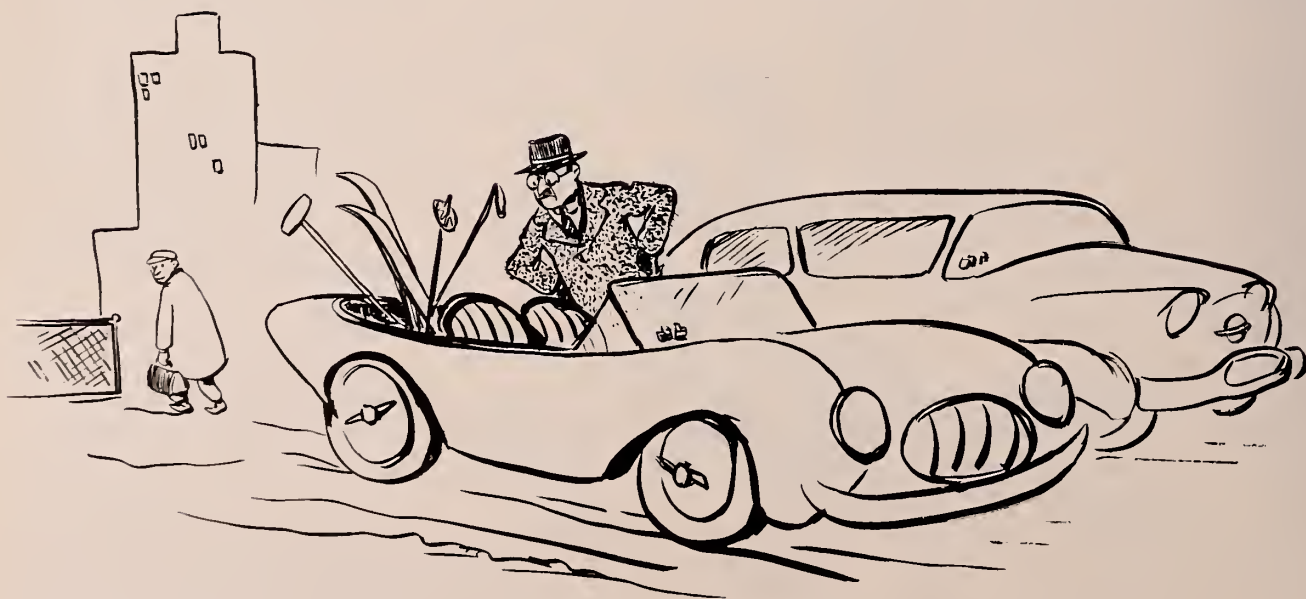
The technique of leaving a baby's harness and bottle should be taught. It implies that one is head of a two-car family, and that one's wife's car has been taken for the day. Female articles add to the effect; gloves, a compact and the like, or even a special cushion to sit on in the front seat. This can only be done intermittently, since if it were a daily practice the ruse would be soon recognized. The trainee should be told, however, that parcels, groceries, things obviously for the home, should never be displayed, since they indicate that one not only has the time to undertake such feminine tasks, but also has the only car.

The showing of recreational equipment should be recommended as profitable. It should have the appearance of having been used—though not too often, lest one be considered to have an undue amount of leisure. Intermittently changing the type of sweater which is wrapped around a golf bag is a good way of giving the proper effect. A daring move is to use something which is sure to draw attention, such

as a polo mallet or a fencing mask. The young doctor should receive special instruction in this procedure, since it can easily be overdone.

Professional displays are obvious but essential. The latest expensive splint for the orthopedic man, the movie projector, screen and slide box for the professor, a portable refrigerator for the vascular surgeon are all effective fundamentals.

The above suggestions for the curriculum by no means cover all the essentials. Possibilities are boundless. One can visualize formal programs with visiting speakers of reputation in the field. A textbook (*Fundamentals of Automotive Medicine*) might be published, and a specialty journal (*Medical Driver*). And we must guard against going too far. Although the gimlet-eyed inspectors from Chicago will undoubtedly take this activity into account in approving a general program, it is not recommended that a Board of Automotive Medicine be formed. The subject should in their eyes rate in the same category, perhaps, as the Basic Sciences. It is hoped that the Harvard teaching hospitals will explore these suggestions and move forward as leaders in this area as they have in so many others in the past.



Atoms in the Medical School

An Address Given at the Alumni Day Symposium, 1956

A. Baird Hastings, Ph.D.

HAMILTON KUHN PROFESSOR OF BIOLOGICAL CHEMISTRY
HARVARD MEDICAL SCHOOL

In August, 1955, I spent two weeks in Geneva participating in the United Nations Conference on Peaceful Uses of Atomic Energy. On my return, I received a communication from Gene Eppinger which read in part: "We would very much appreciate it if you would talk on Alumni Day for 20 minutes on matters relating to the 'atom' and your experience abroad." Hence, my presence here again today after a lapse of only four years.

From where I sit, the Geneva Conference was a great success—though perhaps not for the same reasons that the press would have had us think. To my mind it was a success because it came off at all—and was the first instance in the Atomic Age that all constructive uses to which isotopes and nuclear energy can be put—could be—and were—freely discussed by all countries where active research is under way. Seventy-two nations were represented. There were 1400 scientists and I don't know how many accessory personnel. Our delegation and other personnel alone numbered about 400 persons—of whom 239 were scientists and engineers.

The value of the conference lay not so much in revelations and disclosures of new information, as in

the area of communication. As one of my colleagues put it: "This has been a teaching experience and we've all profited by it."

Over 400 papers were given orally during the two weeks and more than 1000 are included in the Proceedings. About one-fourth were in the fields of biology and medicine, and the Harvard Medical School was well represented by seven papers. So much for atoms in Geneva.

Now, since there is still some time left—I shall make some remarks on Atoms in the Medical School.

Atoms in the Medical School are not a new event. We are just more conscious of them than we used to be. The Greeks had the word for it and the qualitative concept of atoms over 2000 years ago. But the atomic theory of matter did not stick until 1805 when John Dalton brought overwhelming evidence that established it as the basis of all subsequent chemical knowledge. As Linus Pauling puts it: "The existence of atoms is now accepted as a fact . . . They can no longer be considered imaginary."

The Harvard Medical School recognized chemistry—if not atoms—in medicine from its beginning in 1782 because I find that "Dr. John War-

gery and Dr. Waterhouse, Professor of the Theory and Practice of Physic were desired—as may be most convenient to them—to deliver lectures in chemistry until some gentleman is chosen for professor in that department." I gather it was not very convenient to either of the founding fathers—because in May of the next year, even before the students arrived, Dr. Aaron Dexter was made Professor of Chemistry. Nor has it apparently become more convenient with the passage of time, because Harvard Medical School has not been without some designated gentleman professor of chemistry since Professor Dexter's appointment. (For much of my historical information, I am indebted to Professor Harry C. Trimble who has served the Medical School so well for 34 years.)

True enough, chemistry in medicine has changed and grown mightily and there are even those who think that under the name of biochemistry, it is a distinct discipline in its own right. Some express the fear that biochemistry will infect all medicine, and others express the fear that medicine will infect all biochemistry. The only thing that I fear is that one or the other will develop antibodies.

Parenthetically, I might point out that the Erving Professorship of Chemistry, first held by Aaron Dexter, was established in 1791 as a Medical School professorship—and that it continued so until 1856. Josiah Cooke was its incumbent at this time, and he had become interested in 1854 while teaching in the Medical School in the determination of atomic weights. In order to better pursue his work on the subject he requested and was granted permission to work entirely in Cambridge. The Erving Professorship went with him, and was later held by Theodore Richards, Nobel Laureate—renowned for his atomic weight determinations. This professorship never came back to the Medical School and it continues to be one of the distinguished professorships of Harvard's department of chemistry—further evidence of the contribution made by medicine to chemistry at Harvard.

The situation today is far different from that of 100 years ago when Robert Graves of Graves' Disease fame held forth on chemistry as follows:

"Chemistry is a science fully as attractive as botany and medical men are apt to spend too much time in its pursuit . . . A very limited knowledge indeed of chemistry will enable you to ascertain what substances are compatible with each other and a small share of attention will prevent you from making any important mistakes . . . It is not necessary that you should dive into all the arcana of science, or have your memories loaded with atomic numbers (*sic*), symbols and equivalents.

"As to any benefits derived from analytical chemistry in solving the problems of vital action, or elucidating the functions of various organs in health and disease, they may be said to be few and unimportant and inconclusive."

Now, although the atoms in their conceptual and chemical sense have been in business in the Harvard Medical School from its inception, they were put to practical use, consciously and quantitatively in our teaching and research, in medicine

only about 50 years ago.

When these buildings were dedicated in 1906, the department of biological chemistry was in the hands of two instructors—Lawrence J. Henderson and Carl L. Alsberg. The latter won national fame as the Chief of the Bureau of Chemistry of the Department of Agriculture—Henderson transferred in 1908 to Cambridge where he served as Professor of Biological Chemistry until his death in 1942. It is to L. J. Henderson that we owe our modern concepts of the regulation of the acid-base balance of the body and our ability to understand the respiratory functions of the blood.

My distinguished predecessor, Professor Otto Folin, became head of the Department of Biological Chemistry in 1907. He revolutionized chemistry in medicine, both by his ingenious development of accurate, usable methods for blood and urine analysis and by his conceptual contributions to our knowledge of intermediary metabolism. His methods permitted diseases and pathological states to be studied in quantitative, instead of qualitative, chemical terms. Indeed, it may be said that he and his two contemporaries, Benedict of Cornell and Van Slyke of the Rockefeller Institute contributed most of the chemical tools used in medicine up to the dawn of the Isotope Age we are now in.

These men made it practically possible to count atoms in medicine, or at least count the net change in atoms in an animal or patient by measuring intake and output of particular atoms or molecules. It is true that this counting of atoms usually was expressed in gm or mg—but it might just as easily and, in retrospect sometimes more usefully, have been expressed in terms of millimoles or milliequivalents.

I need but recall to you—all of whom have, with and without memorable suck-backs, done Kjeldahls—the use to which one can put the measurement of nitrogen to determine whether a person is in negative or positive protein balance. This was counting atoms retained by, or lost,

from the body—although we seldom expressed it this way. To most of you here, this approach is taken for granted and has been implicitly—if not explicitly—a keystone of metabolic studies throughout this generation. Nor has this aspect of chemistry in medicine been abandoned. It is as important today as it was when Otto Folin Published a "Theory of Protein Metabolism" in 1905.

What happened in the last 10 years is that something new has been added—and it is about this that I now wish to say a few words. This Atomic Age has brought to medicine means of labeling atoms so that one is no longer limited to measuring input and output of materials and then speculating about what happened to them in the body. Now we can trace their migrations from gastrointestinal tract to blood, from plasma to tissues, their chemical transformations in tissues and their routes of excretion.

This age began in 1923, first in Copenhagen when Hevesey followed the transport of lead in bean plants using an isotope of lead. Only a year later, atoms as isotopes, entered the scientific life of the Harvard Medical School when Herrman Blumgart, Otto C. Yens and Soma Weiss used an isotope of radium to measure circulation time in man. And a little later Joe Aub and his associates studied radium and lead deposition in bone in relation to the metabolism of the bone salts. These were our pioneers with isotopes at Harvard Medical School.

In the 1930's Rudolph Schoenheimer, originally a pathologist and then at Columbia, introduced the use of heavy isotopes of hydrogen and nitrogen to study the metabolism of proteins and fats. Out of this came the revolutionary concept of the dynamic state of body constituents.

Our own use of isotopic carbon—carbon 11, with a half-life of 20 minutes—made by the Harvard cyclotron dates from 1940 when Arthur Solomon, George Kistiakowsky, Cramer, an organic chemist, and two biochemists from our department—all catalyzed by Conant

the chemist—undertook to investigate carbohydrate metabolism by labeling lactic acid and tracing the labeled carbon into liver glycogen. I have previously discussed this period before this body, so I shall spare you a repetition of these hectic and heretical experiences, where things chemical in the body, turned out to be *not* what they seem. This was also the period when Shields Warren began his study of the metabolism of phosphorus—with P ³² and its use in the treatment of leukemia. I mention these events today to recall to you that, atoms—and even some radioactive isotopes—were well entrenched in the Harvard Medical School prior to World War II—and well before any atomic bomb had been fabricated or detonated.

Since the War, things have been happening fast, both here and elsewhere, in the use of atoms in medicine—thanks to the current availability of isotopes of almost all biologically important atoms—through the Atomic Energy Commission.

Right after the war—i.e., early in 1946—and with the support of President Conant and the Corporation, we were able to get a program under way at the Medical School for the conduct of research and the training of staff, postdoctoral fellows and students in the use of isotopes. Thanks to the support given it by Dean Burwell and continued by Dean Berry, it has now been effectively operating for ten years—although I regret to say it has yet to attain full administrative and financial stability.

Administratively, it is technically operated by a Faculty Committee on Medical Research in Biophysics. Financially, it is supported almost entirely by annual funds from the Atomic Energy Commission. Actually, it is run by Arthur Solomon, whom I salute for his ability, his research, his unselfish service to students and colleagues.

During these 10 years, responsibility for the operation of the Biophysical Laboratory, as we call it, has been shared by him with a number

of distinguished colleagues. These associates include Dr. DeWitt Stetten, now Scientific Director of the National Institute for Arthritis and Metabolic Diseases, Dr. Seymour Gray of the Department of Medicine at the Brigham, Dr. Christian B. Anfinsen, now head of Biochemistry at the National Heart Institute and at the present time Dr. Manfred Karnovsky of our Department of Biological Chemistry. In addition, about 50 M.D.'s or Ph.D.'s have been members of this group of atomic detectives in the Biophysical Laboratory.

If you should drop in there you would find seven or eight postdoctoral research fellows working with Dr. Solomon or Dr. Karnovsky on such things as production of HCL by the gastric mucosa, the effect of cardiac glycosides on potassium ions in the heart, the biosynthesis of myelin, the exchange of sodium ions across the kidney tubule, the metabolism of lipides, etc. You would also find several candidates for the Ph.D. degree doing research on their theses.

But this would not complete the account of the role of this laboratory in the present life of Atoms in the Medical School. Experiments employing isotopes are included in the biochemistry and physiology courses for undergraduate medical students. Collaborative projects are under way with colleagues in the departments of medicine, surgery, bacteriology, pathology, and biological chemistry and also with colleagues in other institutions.

In addition, since 1946 this laboratory has helped those of us in other departments—clinical and preclinical—get under way with the use of isotopes in research and teaching. The laboratory provides protection rules and monitoring service; it has done our counting for us, if we wished; it has been freely available for consultation, and training, and, to the extent that it is able, service of equipment. It has been the center for the receipt and distribution of isotopes, thus providing both convenience to the investigator and a

great financial saving to Harvard, affiliated hospitals and the A. E. C.

In the 10 years that the Biophysical Laboratory has been in operation, it has reached scientific maturity and national recognition, Dr. Solomon and his colleagues have published about 100 substantial papers plus almost half that number of abstracts and lesser communications. This does not include about 60 from my laboratory which were dependent on Solomon's help, nor uncounted numbers from other departments.

I only hope that 50 years from now, a historian reviewing the progress of the last century will not include a statistic to the effect that the half life of Atoms in the Medical School—as represented by the Biophysical Laboratory—was a finite number. At the moment it is about as unstable as was biochemistry at the time when these buildings were dedicated—and for the generation ahead it is, I believe, just as important. Here is a new and basic pillar of Harvard University's Medical School in the half century to come. May it prosper as well as has biological chemistry in the 50 years just past!

Whatever may be the fate of atoms in the world at large—atoms in the Harvard Medical School are certainly here to stay.

Some of you may recall that four years ago I ended my remarks with the conclusion that

"The man we see with eye or scope
Is not the same by isotope.
And hard though biochemists try,
He still defies their prying eye."

To which, today, I add,

That even if we get man taped
With chemistry's precisions,
There'll always be the question left:
How *does* man make decisions:
For the more we learn of atoms
The further they retreat
To neutrons, protons, mesons
And glue that we can't meet.
And the more we learn of people
The harder it is to ken
How thought results from atoms
And minds evolved in men.

Editorial

BOARDS AND CIRCLES

Since World II there has been increasing interest—and argument, concerning the purposes and the functions of “Boards of Certification.” Some of us, having served on these boards, are aware of their good points and their bad points. Certainly we have heard a great deal about their faults. The present writer has served for nearly eight years on one of these boards. When he first joined, his position was comparable to that of a man who over the years has been very critical of the restaurant service in his club. Such an individual, if put on the restaurant committee, as was the case in this instance, often changes his attitude. It does not take long when one begins his term of service on a restaurant committee or on a board of certification to appreciate that there are two sides to the problem.

The methods of a board of certification are constantly under survey, and constructive changes are constantly being made by the members themselves. There is still, of course, room for improvement, particularly as regards flexibility of standards and requirements, and even more important, better methods of determining the candidate's fitness. A perfect system probably will never be attained, for in the training of a physician or surgeon the true evaluation of the candidate's *character* is difficult to obtain by any type of examination, and the *character* of the candidate is all-important in the making of “the good physician.”

Ideally, if a man serves for a variable period of time under the preceptorship of a man well trained in his field, who is keenly interested in the education of these young men, “certification” by the preceptor himself might be taken as warranting certification by the appropriate board. Human nature being what it is, this ideal of certification on recommendation by the preceptor is probably unattainable, certainly at the present time. To do this you must establish certain standards and requirements for the preceptor himself, and we find ourselves at the same starting point. By whom, and by what standards shall the preceptor be judged?

Indeed it has already been suggested that there be “boards” who will certify not the candidate, but his teachers. It is certainly true that the board on which the writer has served has spent many hours of thought and effort on the evaluation of the examiners as well as on those examined.

Moreover, attention should be more on the *education* than on the *technical* training during these formative years, but there must be certain yardsticks and standards, both as regards length of time spent and the quality of the education received.

One of the most frequent criticisms levelled against board certification is the length of time required after graduation from medical school. One hears references to "the good old days." But let us review what obtained at Harvard Medical School over 150 years ago. From the date of our School's founding in 1788 until 1811, the governing bodies of Harvard awarded the degree of Bachelor of Medicine (M.B.) on graduation from the Harvard Medical School, and these old records state that "after at least seven years following graduation and after proper examination, the holder of an M.B. degree may be awarded the degree of Doctor of Medicine." It would seem that in those "good old days" it was recognized that graduation from the Harvard Medical School was only a start in earning the degree of Doctor of Medicine.

But following 1811 the degree of M.D. was granted on graduation as it is today. Can it be that this date (1811) is only merely coincident with the opening of the first of Harvard's great teaching hospitals and that preceptorship in a teaching hospital—call it "house pupil, intern or resident"—began to be recognized as a needed adjunct to the medical school itself, and that an M.D. degree was therefore justified on graduation?

More than half a century then passed, and attention was again brought to the inadequacies of the training at Harvard Medical School. The late President Charles William Eliot—against violent and even virulent opposition—started the much needed reforms that were to make this M.D. degree more significant as evidence of proper training during the undergraduate years.

When one considers the advances in the fields of medicine over the past few decades, one cannot but believe that the position taken by the governing bodies before 1811 has a certain value today. Certainly if they felt it required seven years after graduation to justify the degree of M.D., may it not still require a comparable time to train the graduate of our School for "certification" in his field?

Most of us do feel that further training following graduation from the medical school is needed before entering private practice, call it "certification," "preceptorship," or what you will. If so, have we not returned to the ideas of our predecessors of now more than a century and a half ago; to wit—is not the "certification" of today curiously similar to the higher degree of Doctor of Medicine granted until 1811 by Harvard Medical School *only* after "seven years of training following their graduation and after proper examination?" Have we made a complete circle, only to find that the end of a circle is the same as its starting point?

T. H. L.

Tomorrow (Monday), June 18, our gala observance of the ever glorious
BUNKER HILL DAY.

By their presence on the day and evening, a delightful refuge from the hot streets of
the city. Come and witness the great military display.

WISE HEADS BAFFLED!!
THIS "CENTAUR," THIS
IS HALF MAN, HALF HORSE,



PRECISELY AS HE APPEARS

AT

AUSTIN

AND

STONE'S.

FACTS!!!

No specimen of freak of nature ever exhibited,
either by nature or otherwise, has ever created such
a profound sensation as this, which will be attended
the coming week by this strange being, known as
"Centaur," at

**HALF MAN
AND
HALF HORSE.**

Such a combination of the human and animal
creation has never previously been known to exist.
The centaur is not an record in the history of
any age or nation.
The verdict of every eminent veterinary surgeon
who have examined him is that the bones and mus-
cles of his arms and legs are

IDENTICAL WITH THOSE EXISTING

**IN THE FR
THE HORSE**

His every move-
ment is perfect and his

More Than

tion before the
the base of
and nothing until
black to submi-
in anaesthetic.
sion of the spi-
foreign matter
hair on his head
than the doctor
I suppose you
and the form he
e to with the emb-
e to light and cri-
the, as a similitu-
the, as a similitu-
the, as a similitu-
the, as a similitu-



THE BOHEMIAN TWINS.

child of
feminine
masculine
left side
external
feminine

THIS WEEK

THIS WEEK!

THIS WEEK!

THIS WEEK!

THIS WEEK!

THIS WEEK!

THIS WEEK!

FACTS!!!

The upper portion of his body is unquestionably
human and the lower portion may with equal cer-
tainty be regarded among the equine species. He is
most decidedly a marvel, and should be seen by
everybody during the week commencing

TOM THUMB AS HE WILL APPEAR AT PARIS.



THE REPRISAL OF WELLINGTON AT WATERLOO.

As it is the intention of M. HANSEN to visit Paris with Tom Thumb,
he in the handsomest manner invited Punch to have a private view of the
General in the costume in which he will exhibit to our lively neighbours.
The General, having worn out Napoleon in England, he will there, in
pulsate deference to French prejudice, appear as the **DUCKE OF WELLINGTON**.
The decided style in which the General wears his hat is in the finest
imitation of the noble Duke— whilst his management of the double eye-glass
is perfection. He will besides, for the especial delight of the Parisians,
dance a hornpipe— for the manner of his Grace, and, moreover, sing a
reform Bill. When the General returns to America,
he will, as usual, be accompanied by his faithful servant, the Duke of Wellington,
such as JONATHAN by appearing as the PRINCE ALBERT.

DORIS'S 8TH AVE. MUSEUM.
THE 3-HEADED LADY.



KATINA GESSLER, the Swedish Nightingale,
from Zurich, Switzerland, a phenomenal woman
with 3 heads on one body. In order to live in
this world and an extra change of programme in the
performance of her duties. Performance program on at all
times. Admission only 10c. **NO OTHER.**
HUMAN BEING WITH 3 LEGS.
THE FIRST OF OUR OWN THIS
SEASON'S EUROPEAN IMPORTATIONS.

AND STONE'S

STONE & SHAW Sole Proprietors



Figure 1. "... the really interesting people of the world ..."

This Way to the Side Show

"The Anthropophagi and men whose heads do grow beneath their shoulders"—*Shakespeare*

Theodore H. Ingalls, '33

Once upon a time there was a day when the Big Top came to town. That was the dawn when small boys set their Big Bens for 4 o'clock and took the open air street car to the outskirts of the city. Here they busied themselves carrying water for the elephants and hay where directed, as they watched bug-eyed while a rotary-sledge-swinging crew of six brawny hands sent the great tent pegs biting into the ground in a staccato series of spurts. Later in the day came the circus parade complete with red and yellow vans and barred cages in which were pacing leopards, sullen lions and even tigers. The vans alternated with floats on which were festooned bands or ladies in red tights who carried parasols with a refined hauteur (as became great ladies in red tights). And steam calliopes could be heard coming blocks away. A calliope was no calliope unless it was a steam calliope. Later in the day there was The Greatest Show on Earth itself, with all the smells of a parched swamp and the invisible steam of human beings and animals, resulting in a subtle blend of canvas, sawdust, animal dung and lemonade. There was nothing like it, nor is it matched by anything today—not the Army-Navy football game, the "Ice-Capades," *War and Peace* in Cinemascope, or the grand march from "Aida." And when the unflagging curiosity of small boys was glutted with the simultaneous spectacles of a three-ring circus and the combined noises of tent-top trapezes, whip-cracking animal trainers, bands, merry-go-rounds and clowns, they could go have their pictures taken for 10 cents or jostle to the side show for another dime.

Here were the really interesting people of the world (*Figure 1*), the tattooed man, fat lady, bearded lady, human skeleton, dwarfs, giants and freaks. One year they might include a good pair of Siamese twins; another a three-legged man who seemed to be equipped

with a kind of campstool (*Figure 2*), which might come in very handy at picnics, but must have made it difficult to sit on a rotating stool at a soda fountain. And as for kicking a football with it (which he did to the astonishment of the beholders), well, it was an unconvincing operation in terms of football prowess.

Today, side shows have gone the way of steam calliopes, Saturday night band concerts, dinosaurs and the three-toed sloth. But the remains of the side show have been preserved at the Harvard Medical School. They date back to the time when a freak was a perfectly respectable part of a parade, when a good bearded lady could be counted on at the Sels Floto circus and when Barnum and Bailey presented Eng and Chang as merely the pièce de résistance of an assemblage of endocrine and developmental anomalies that was guaranteed to leave you pop-eyed. Down at Scollay Square, Austin and Stones' museum featured "a living human being with 2 HEADS 2 LEGS 2 MINDS 2 HEARTS AND BUT ONE BODY." Whereas Doris's 8th Avenue Museum in New York City could go one better with Katina, "THE 3-HEADED LADY," who was pictured as busily fanning the right-hand head. Truth to say the right-hand head did look a bit more uncomfortably hot than the other two. Miss Katina Gesler (the presumption is that she was not married) was billed as "the Swedish Nightingale from Zurich, Switzerland, a phenomenal woman with 3 heads on one body, 16 other Living Wonders and an entire change of programme in the three vast theaters, Admission only 10c."

The Woodworth Collection

This information about Katina (the Swedish Nightingale from Switzerland!) comes from the musty, dusty files of the Woodworth Collection in the anatomy



Figure 2. "... equipped with a kind of campstool ..."



Figure 3.
"... her three-legged companion ..."



Figure 4. Charles Addams slept here

library. Here in the Minot reading room is the final repository of William Woodworth's lifelong interest in any and every account of the no-armed, the three-legged, the very old, and very tall, the very fat and the very short. Here also lies his Junior Thesis of 1884 on "The Origin of Double Monsters," and his Senior Forensic the following year on "Natural Selection in Determining Variations of Animals and Plants." Here is his collection of priceless incunabulae with their accounts on parchment of weird happenings of yesteryear.

The emphasis is descriptive as in the swapping of fish stories. The taller the yarn, the more freakish the freak (*Figure 3*), the more suitable it was for publication, illustration, exhibition or even embalming. And yet behind the stubborn hobby of this collector (who received his M.A. and Ph.D. from Harvard and taught microscopic anatomy in the '90's), an appreciation is discernible that application of the scientific method might one day serve to explain these extraordinary events. This is implicit in the very existence and nature of the Woodworth collection. It is evident in the medical descriptions and contemporary interpretations of supernumerary, absent and twinned digits (*Figure 4*), of accounts of fish "cripples," the drawing of a two-headed snake and the photograph of two-legged Jenny and her three-legged companion. Some of the anomalies are today recognizable as endocrine disorders—hyperparathyroidism, for example—but the great majority are of congenital origin. Patently, the fundamental interest is an attempt to understand rather than to record the sensational. The theme that underlies the acquisitions is an absorbing interest in the nosology of a poorly understood phenomenon. This was clearly a lifelong serious interest manifested in half a dozen student papers and carried right on through to the new century. "Dear Billy" reads a letter of May 18, 1892, offering him a specimen "... it is a live chicken with three legs, the



third leg occupies the place where the tail ought to be . . . If you want him let me know," signed—Geo. Wheelwright."

After William Woodworth's death in 1912, the collection was willed to Harvard College and later dispatched from across the river to the Anatomy Library in Building B. Whatever the scientific merits of the Woodworth collection, its atmosphere remains that of the side show. To state this is not to deprecate it. The side show was a simple case-finding device of the time, and although probing medical investigators made examinations in the nude wherever possible, particularly of infants, practically every older freak is in his (their!) best velvet circus suit trimmed with ribbons and braid and wearing tasseled shoes, all ready for the unabashed stares of those who had paid the admission fee.



Figure 5. "... Boston will be deprived of seeing it . . ."

Billy Woodworth's was not the only interest in teratology. On November 24, 1887 the Boston Herald speaks rather wistfully of the two-headed baby "now on exhibition in Chicago . . . which in that part of the country is considered to be one of the greatest of Nature's freaks. Nearly every museum manager in Boston has endeavored to secure this curiosity at a cost of \$1,000 per week, but Boston will be deprived of seeing it (Figure 5) by reason of Massachusetts' law concerning children." Presumably Boston never got to see this one of Nature's greatest freaks for the Tipton twins (they were born in Tipton, Indiana, June 24, 1889) died in Buffalo, New York on February 20, 1890 of the measles. But William Woodworth did get their pictures, and the Harvard Medical School got life casts, which found their way to the teratology collection in the Warren Museum when that assemblage of curiosities became housed in the top floor of the Administration Building.

Somewhat less genteel than the Woodworth collection, the casts and original specimens of the Warren Museum are authentic, but undeniably grisly. This fact is what puts them definitely lower than the glass flowers of the Peabody Museum as recommended exhibitions to be seen by visiting relatives. The slightly more sophisticated can be taken to witness the crowbar skull, but only the medically innured are up to the whole sweep of specimens—the seven-fingered and the six-toed (Figure 4) and the dicephalic capra (Figure 6) (well stuffed and looking very like a two-headed kid) are the tamest of the lot. What became of the three-



"The very short"

legged chicken is not clear, but elsewhere on the well stocked shelves are specimens of craniopagus, thoracopagus and pygopagus twins; anencephalic and acephalic fetuses and even such rarities as Sympus dipus, ectromelia and cyclopia; they comprise as fine a collection as you might wish to see.

THIS WAY TO THE EGRESS



Figure 6. ". . . well stuffed and looking very like a two-headed kid . . ."

DIAGNOSIS DEFERRED

Philosophy of the First-Rate

Despite the base canard that other species of graduate students, such as those straining after the gnat of philosophy, have higher intelligence quotients than those who embrace the study of physic, it is still hard enough for the applicant to find himself enrolled in a first-rate medical school. The business of becoming honored as a physician has in fact achieved something of a reputation for difficulty of attainment. To those also who have to do the selecting of candidates the matter is of some concern, regardless of the opinion of various aspirants not chosen.

Anecdotes about the ease with which enrollment was consummated in bygone generations, when it was necessary only to walk in and sign the register, are still current. The only remembered advice given to this deferring diagnostician and his Hippocratically inclined classmates at Harvard College was to take plenty of German, since that was the language of science. In somewhat the same relation the words of President Gilman of Johns Hopkins University a century ago are worth recalling; that the son of the family who was eased into medicine was the one too weak to farm, too indolent to labor, too stupid for the bar and too immoral for the pulpit.

Dan Funkenstein of our own Committee on Admissions had something to say on the subject to the Council of the Medical Alumni Association last winter, for he, with others, is engaged on a quest under the auspices of the Association of American Medical Colleges. This hunt, which has already picked up

fresh spoors, is for an effective method of identifying those candidates most likely to make successful doctors. Certainly no reasonable critic would ask what, in Harvard's collective mind, constitutes a successful doctor and how he may differ, if at all, from a contemporary graduate of Tufts or McGill, or Hopkins or Iowa State. What, after all, is successful doctoring? The range seems wide between the activities of the Bingham Associates down East and Bert Vallee's sequential probability ratio testing in the bowels of the Brigham.

Higher education at its best appears to incorporate a tolerance of ideas—a freedom to ask questions—and the principle that excellence tends to perpetuate itself. Sir Richard Livingstone, former president of Oxford's Corpus Christi College, speaking at the First World Conference on Medical Education in London in 1953, interpreted education as the "Philosophy of the First-Rate." The thesis was that "an educated man knows, and an uneducated man does not know, what is first-rate and . . . the best educated man is he who knows the first-rate in the most important human activities."

The education of Nathan Smith and what he did with it seems to illustrate this intellectual expansion, as described in Harrington's history of the Harvard Medical School. Born in 1762 of poor parents, Smith spent his boyhood in Chester, Vermont. At 21, still a farm laborer, he held the thigh of a boy while it was amputated by Dr. Goodhue, of Putney. After the operation, in the course of which young Smith had

been permitted to tie off a few arteries, he requested the opportunity to enter Goodhue's office as apprentice, and on being asked his qualifications replied: "Until last night I have labored with my hands during my life."

Goodhue insisted that the youth must first qualify for admission to the freshman class at Harvard College, which he accomplished in a year. After a three-year apprenticeship he opened a practice in Cornish, but soon realized his shortcomings and applied for and was granted admission to Harvard Medical School, from which he graduated as a bachelor of medicine in 1790, the sixth to receive the degree. There followed six years in practice; he then approached the trustees of Dartmouth College with a plan to establish at that institution a "Professorship of the Theory and Practice of Medicine."

The proposal was approved, and after a year in Europe, during which he was made a corresponding member of the Medical Society of London, although still lacking a doctor's degree, Smith delivered his first course of lectures. He was himself awarded the M.D. degree in 1801. Gradually under his guidance the school grew, its founder holding the positions of professor of medicine and lecturer on anatomy, surgery, midwifery and the theory and practice of physic—not a chair but a whole settee, as Oliver Wendell Holmes later characterized it. Such was the eloquence of the professor and lecturer, according to a later account, that after attending one of his discourses President Wheelock

offered as a prayer at services: "O Lord, we thank thee for the oxygen gas; we thank thee for the hydrogen gas and for all the other gases. Also, O Lord, we thank thee for the cerebrum, the cerebellum and the medulla oblongata."

In 1812 Dr. Smith accepted the professorship of the theory and practice of medicine and of surgery in the newly established medical department at Yale, and saw it grow into a medical school through his efforts; in 1821 he was invited to establish a school of medicine at Bowdoin.

Perhaps a good way to select medical matriculants today might be to have them lay hold of a nether limb in process of amputation.

CORRESPONDENCE

Editor's note: The Editors of the *Bulletin* reprint the following letter from an Alumnus because we feel it shows in a significant way how deeply the writer feels about the benefits he received from the year he spent abroad as a Moseley Travelling Fellow. We are very grateful to him for granting permission to publish this letter.

Fellowship Committee
Harvard Medical School
Boston, Massachusetts

Gentlemen:

In 1948 you awarded to me a Moseley Travelling Fellowship which permitted me to spend a year studying in London and travelling in Europe. The experiences and contacts of that trip

have aided me immeasurably in the practice of medicine and the appreciation of life.

I should like to present the enclosed check for one thousand dollars (\$1,000) to your committee to use as you see fit to help some student at Harvard. If you wish, I should be happy to have the money used for unrestricted endowment or current expenses. It was my privilege to have a Moseley Fellowship, but in a true sense every student at Harvard, whether he admits it or not is on a scholarship. As time and ability permit I hope I can make further contributions.

Sincerely yours,
(Name withheld by request)

BOOK REVIEWS

FORKNER, CLAUDE E., Editor: Practitioners' Conferences. Volume IV. Appleton-Century-Crofts, Inc., New York, 1956. 407 pages.

This is the fourth in a series of verbatim reports of conferences held at the New York Hospital-Cornell Medical Center, and it includes the following subjects: Pulmonary Hypertension, Hypothyroidism and Tests of Thyroid Function, Hyperthyroidism, Fractures of the Hip, Mechanisms of the Anemias, Treatment of the Anemias, Burns, Obesity, Ileitis, Homosexuality, Pheochromocytoma, The Role of Religion in Healing, Cancer of the Rectum, Patent Ductus Arteriosus and Coarctation of the Aorta, The Treatment of Chronic Rheumatic Heart Disease, and Pinworm Infection. These conferences were originally designed to improve the medical care of the community in and about the New York Hospital-Cornell Medical Center by inviting local physicians to participate in this form of postgraduate education.

Each of the subjects is clearly presented with excellent discussions of the pathophysiology and methods of treatment. There are many provocative questions from the members of the panel and occasionally from the audience. The subjects are reviewed in such a comprehensive and attractive manner that this text is an excellent method of obtaining an up-to-date review on any one of the listed subjects.

As the meeting is designed for the general practitioner, it provides a comprehensive review of the subject, but there does not appear to be much attention paid to practical therapeutics. As an example, it does not seem likely that the practitioner

on the east side of New York is going to be able to supply intermittent positive pressure for his "pulmonary cripples," nor will he be able to base his therapy on the arterial oxygen saturation. As a possible reflection of this, the number of questions asked by outside doctors in the audience seems rather small, even though they are invited to interrupt at any point in the proceedings. The rapid pace of clinical research is revealed in the discussion of hypothyroidism where there is no mention of 3, 5, 3'-triiodo-L-thyronine.

There is no question that these interesting and enlightening conferences do much for postgraduate education and serve as well to develop improved rapport between the Medical Center and its local physicians. I would recommend this volume not only to general practitioners, but also to medical school teachers and students as well.

ROE E. WELLS, M.D.
Clinical Associate in Medicine
Harvard Medical School

LEE, ROGER I.: *The Happy Life of a Doctor*. Little, Brown and Company, Boston, 1956.

This book is an anecdotal autobiographical summary of the professional life and thoughts of Dr. Roger I. Lee of Boston. Dr. Lee, a prominent internist, has at one time been President of the American Medical Association and of the American College of Physicians; Dean of the Harvard School of Public Health; and at present a member of the Harvard University Corporation.

Dr. Lee's format carries the reader through his early medical school training in Boston and gives one a glimpse of the

taproots and background that led him into medicine. There are chapters describing his experiences in setting up the Harvard School of Public Health and of his association with Presidents Eliot and Lowell in the advancement of medical teaching at Harvard. There is a chapter describing his work as professor of hygiene at Harvard. He also describes his activities here and in Europe in World War I, and finally there are many personal views into the life of an actively practicing internist. Dr. Lee has no startling burden to unload on his reader. He obviously represents the side of the pure clinical more than the present-day, part-time clinician, part-time research man; and one senses a bit of sadness in his mind at the change. Dr. Lee's book is perhaps best when it gives one these very honest statements of the author's psychology of life and views on medicine, teaching and the care of the patient.

There is humor, and those who fear corpulence and a high fatty acid serum level will derive a large measure of comfort from Dr. Lee's thoughts on diet and exercise. There are his brief personal encounters with men of medical renown such as Sir Alexander Fleming and Sir William Osler; there are glimpses of great men in other diverse fields of endeavor, such as Sir Winston Churchill, Walt Disney and James Conant.

The book combines the author's wit with his more profound thoughts in an attractive and certainly readable manner, and sometimes makes the reader wish that he, too, had reached the age when he could take pen in hand and enjoy writing his memoirs.

JOHN R. BROOKS, '43B

Harvard Medical Alumni Bulletin

Inside H. M. S.

Palms Against the Morning . . .

Paul Altrocchi, '56

"If ever you miss me suddenly,
You'll know I've got sick for the
full moon
On these little thatched roofs,
And the palms against the morn-
ing . . ."

Rupert Brooke loved the Pacific Islands, and a recent survey of stranded sailors, beachcombers and travelling medical students confirms the view that the lure of the islands, once instilled, remains strong. Not only are the islands scenically beautiful, at times surpassing their enthusiastic literary descriptions, but the inhabitants and cultures, despite prolonged contact with lighter-pigmented milk-and-maalox peoples, offer many attractive features. The following paragraphs contain a few impressions derived from a year's Sheldon Travelling Fellowship in Tropical Medicine to the South Pacific and Africa.

Leaving San Francisco by ship and heading out into Melville's great blue Pacific expanse of rippled solitude, one is sometimes rather rapidly rippled into a strong desire for solitude! Alone with a hyperactive chemoreceptor trigger zone, one is then faced with the Great Dilemma of the Ocean Voyager: to eat or not to eat! The British, after long experience sailing to and from "the colonies," have come up with a jolly-good solution: drink one's tea and think of England! Reaching Hawaii in a week, however, the problem soon solves itself as one turns toward the greater tranquillity of the



The author and Fijian friends

southern seas, and in another week one arrives at Suva, capital of the Fiji Islands.

The Fijian people, with dark skins and magnificent heads of woolly hair, are Melanesians who may have originated in Africa. Torn by cannibalistic civil wars and threatened by Tongan conquest in the mid-1800's, they offered their 300 islands to the protection of Great Britain, and became a British Crown Colony in 1874.

After spending seven weeks in Fiji, a good portion of the time in rural villages visiting native doctors, accompanying a W.H.O. Yaws Control Team into the mountains of Viti Levu, and visiting the Leprosy Colony on Makogai Island, one is quickly impressed with the Fijian "personality-structure," perhaps the

most likeable in the Pacific—genuine, friendly, honest, generous, capable and intelligent. Their hula, however, is not exotic; they themselves prefer the "tra-la-la," an altered version of the Bunny Hop!

The Central Medical School in Fiji offers a very good five-year course to natives from all over the Pacific. Often starting with meagre background, humble circumstances and linguistic difficulties, they graduate as Assistant Medical Practitioners, and the quality of their medical work varies from mediocre to excellent, as in this country. They place less emphasis on L.E. preps and serotonin levels and rightly concentrate on the practical problems of the islands, both in daily medical care and in public health. The obstacles they meet are often cultural ones, and there are still many places in the Pacific where modern medicine is either frowned upon or feared.

* * *

When Albert Schweitzer once was asked why he always travelled third class on European trains, he answered that he did so because there was no fourth class! This could also be used as the reason for sleeping on a mat on the deck of the S.S. *Tofua* on its five-day trip from Fiji to Samoa by way of the scattered Islands of Tonga.

Tonga today is the only independent kingdom in the South Pacific. Queen Salote herself, impressive both for her dignified bearing



Queen Salote

and her massive somatotype, won the affection of the English people at the Coronation of Queen Elizabeth by riding in an open carriage through the rainy streets of London, and she rules her people with maternalistic wisdom and kindness.

The oldest inhabitant of Tonga has been idly keeping watch over the Palace grounds in Nukualofa for almost 200 years, this longevity expert being a tortoise presented to the Royal family by Captain Cook!

The concept of generosity has been highly developed by these Friendly Islanders, to such an extent that almost anything commented upon or praised by a visitor is immediately presented to him as a gift. One may readily and correctly imagine that at various times this has led to interesting, gratifying or embarrassing situations!

* * *

Samoa, like other islands in the Southeast Pacific, is free from certain of the major world diseases, e.g. malaria, yellow fever, sleeping sickness, schistosomiasis, and to a large extent, under-nutrition. The presence of yaws, leprosy, tuberculosis and filarial elephantiasis, however, has not prevented the Samoans from developing a highly intricate, gra-

cious and cohesive culture, and a language so melodious that it has been called "the Italian of the Pacific."

Robert Louis Stevenson was so enthusiastic about Samoa that he spent the last five years of his life there, as the well-liked "Tusitala" or "Teller of Tales." He died in 1894 at the age of 44, and is buried, by his own wish, on top of Mt. Vaea, a very beautiful view-point overlooking the town of Apia, the reef-enclosed harbor, and the palm-lined Samoan shore. On Stevenson's tomb is his own well-known inscription:

"Under the wide and starry sky,
Dig a grave and let me lie.
Glad did I live and gladly die.
And I lay me down with a will.

This be the verse you grave for me
Here he lies where he longs to be.
Home is the sailor home from the
sea,
And the hunter home from the hill."

The prevalence of an especially ineffective and harmful form of native herb medicine in Samoa is steadily decreasing, but its effects are still distressingly common. Many are the patients with advanced acute abdomens who enter the hospital close to death with the tell-tale greenish tinge of several days' tropi-

cal herb applications on their abdominal skin. The treatment of conjunctivitis used to involve rubbing the cornea with coconut husks dipped in salt water, and earaches were treated with broken pieces of shell forced into the auditory canal. Equally bizarre methods and ideas, however, can readily be found in most "civilized" cultures, and the trained Samoan doctor practices good medicine.

The seven weeks spent in Samoa included Christmas, and their happy greeting to visitors is "Manuia le kalisi masi!" a direct derivative of "Merry Christmas!" They celebrate the holidays with pig feasts, dances and parties, which provide ample outlet for the Samoan love of long and praiseworthy oratory.

* * *

The Hawaiians, Samoans, Tongans, Tahitians, Cook Islanders and Maoris of New Zealand are all Polynesians and speak similar tongues. They used to be magnificent navigators and frequently made the long voyages between islands in their small sailing vessels, utilizing their intricate knowledge of stars, winds and tides to guide them even for the several thousand miles between Hawaii and New Zealand. Today there is little ship traffic between the islands and in order to spend six weeks in Tahiti, one must take a sea



Les jeunes filles s'amusent

plane for the 1500-mile trip eastward from Samoa toward South America.

One is naturally reluctant to add another hyper-laudatory description of Tahiti to the already long list, but the outstanding natural beauty of the island, the delightful blend of French and Tahitian cultures, the picturesque customs, and the gay and happy attitudes of the people form a pattern which is uniquely captivating.

One Tahitian girl summarized the motivating force as "*s'amuser*," and through uninhibited dancing, singing, congeniality, and a flair for enthusiastic enjoyment of the moment, they have a very good time.

Their hula is fast, vibrant and somewhat more than suggestive. Last year a group of Tahitian dancers entertaining in Hawaii (conservative hula territory) gave such exciting performances that the local advisory board felt constrained to give warning that unless they diminished the breathless intensity of their pelvic gyrations (the latter being a term used by Melville) they would be asked to return home!

In Papeete, the main city, one hears fairly frequently the names of Nordhoff and Hall, but only rarely is Gauguin mentioned despite the prominent role played by Tahiti in his artistic career. Although he gave many of his paintings to friends, little of Gauguin's work remains locally. One French doctor is said to have thrown 25 of Gauguin's paintings into a fire, regarding them merely as idle dabbings.

Medically, filariasis is considered an inconvenient disease and an extensive elimination is now in progress. The leprosarium is so well managed and pleasantly located that many patients even when cured, are reluctant to leave.

No less reluctant, however, is the enthusiastic visitor who has been captured by the multiple charms of Tahiti and finds that all too soon his ship for New Zealand is departing. Optimism is renewed, however, when the lei which one throws over the side floats back toward Tahiti—a sure sign that one will return!



Wahgi Valley fashion plate

After six weeks in the literate cultures of New Zealand and Australia, it was an interesting change to take an airplane from Brisbane 2500 miles north toward one of the most "untouched" non-literate cultures remaining in the world. For many years the rather rugged mountainous Central Highlands of New Guinea were considered uninhabited despite occasional reports by coastal natives that "different-looking" people had been sighted in that area. It was believed that the Highlands were too steep and too barren to support a population, although several early German missionaries reported that some of the cloud formations were more typical of grasslands than of mountains. Following these leads, thirty years ago two Australian gold-seekers and adventurers made the long and difficult hike into the interior, happened upon the appropriate mountain pass, and discovered the Shangri-la-like Wahgi Valley about fifty miles long and ten miles wide in the midst of the mountains, with fertile soil and a "spring-like"

climate all year round, containing half a million colorful natives!

Despite the intervening years of contact with whites, these smiling short-statured people still carry spears, axes, bows and arrows, cover their bodies with grease, paint their faces with bright designs, put shells through their noses, wear magnificent headdresses of Bird of Paradise plumes, and occasionally kick their wives in their malarial spleens! The local mosquitoes are quite large and said to be so well organized that they carry fireflies with them to light the way for the attack!

One of the main medical problems of the Highland natives is protein deficiency, a situation said not to have been improved by the white-enforced abandonment of cannibalism! It has been reported that the taste of human flesh is somewhat sweet, like tender pork, although "the literature" is scanty on this point. Some natives were noted gorgers of human flesh and could eat an entire extremity in a single sitting. For those who relish clinical



Dr. Schweitzer at Lambaréné

pearls, it is said that there is a tell-tale ocular and peri-orbital "greasy-look" associated with such people! Incidentally, recent attempts to replace the aforementioned now-missing delicacy with lima beans have been met with a certain amount of disenchanted diffidence!

* * *

To reach the intriguing and massive continent of Africa from New Guinea required a return to Sydney by plane, followed by a pleasant 22-day cruise on a British liner to Port Said by way of Melbourne, Adelaide, Perth, Ceylon, Aden and the then-unblocked Suez Canal. The final two and a half months of the trip were spent last summer in Egypt, Jerusalem, the Sudan, Uganda, Kenya, Ruanda-Urundi (land of the tall Watusi dancers), the Belgian Congo and French Equatorial Africa. The many impressions of these fascinating areas are reluctantly omitted in order to make a few comments about Dr. Albert Schweitzer's hospital in French Equatorial Africa.

In his early twenties Schweitzer made the decision to devote himself to theology, philosophy and music until the age of 30 and after that to

the direct service of humanity. At first he thought of working with orphans and wayward children, or tramps and discharged prisoners. Finally he decided to become a missionary doctor so that he could put the religion of Jesus into actual practice without merely talking about it. He decided on Africa for many reasons, among them an early interest in Africa's problems through conversations with his father, memories of a statue by Bartholdi in Colmar showing a Negro in chains, a desire to atone for the many wrongs against the blacks committed by whites, and an urge to live a life of simple Christian love in an area of need.

His present hospital at Lambaréné consists of more than 45 buildings situated on a sloping bluff overlooking the Ogowe River and housing as many as 750 natives, including 250 lepers. He himself did most of the building work, in his early days having to spend as much time as carpenter and foreman as he did as doctor. He purposely kept his hospital simple in design and construction, so that his patients would feel comfortable and would regard it as a friendly village for sick people, rather than as an impersonal set of medical buildings.

Dr. Schweitzer no longer does medical work except in consultation, leaving the rest to his staff of two doctors and about twelve European nurses. He still works a 14-hour day, running the hospital, directing new projects and keeping up with his massive correspondence, leaving little or no time for the writing of four books which he has formulated in his mind, two of which are concerned with the key phrase of his philosophy, "Reverence for Life."

Now in his eighty-third year, he is particularly happy that his hospital is self-sufficient as to food, and that his leper village, financed in large part by his Nobel Peace Prize award and long one of his favorite projects, has been successfully completed.

The guest at Lambaréné is greeted with warmth and hospitality, has his own guest room, and takes his meals (including crocodile steak!) with Dr. and Mrs. Schweitzer and the rest of the hospital staff around a large kerosene-lamped table. The evening meal is preceded by a short grace in French, the conversation is mainly in French and German, and the meal is followed by a German hymn with Dr. Schweitzer at the piano. The guest usually chooses to do some helpful work around the hospital during his stay, whether it be watering the garden, helping in the dispensary, or trying to feed milk to orphaned baby goats! When departure time comes and the Air France plane for Paris and Boston is ready to take off, perhaps more prominent in one's thinking than the amazing breadth of Dr. Schweitzer's accomplishments is the simple yet vivid impression of a kindly, hard-working doctor who, through the power of his ideas and by means of an enviable *modus vivendi*, has created an African hospital which, although not very modern, is infused with a special degree of kindness and friendliness not often encountered.

A week's visit with Dr. Schweitzer in this atmosphere which he has created in Lambaréné was a pleasant and interesting way to end a year's travelling fellowship.

INTERNSHIPS, CLASS OF 1957

Photographs by Francis Curley

Unless otherwise noted all *internships* start July 1, 1957 for one year.

<i>Name</i>	<i>Hospital (and location)</i>	<i>Service</i>
Abel, Francis L.	Thomas D. Dee Memorial, Ogden, Utah	Rotating
Adams, Thomas W.	Children's Medical Center, Boston	Pediatrics
Alexander, Sidney	Peter Bent Brigham, Boston	Medicine
Altrocchi, Paul H.	Salt Lake County General, Salt Lake City, Utah	Rotating
Aronow, S. Wilbert	Michael Reese, Chicago, Ill.	Medicine
Bair, Glenn O.	U. of Kansas Medical Center, Kansas City, Kans.	Medicine
Baker, George P., Jr.	Massachusetts General, Boston	Medicine
Bihari, Bernard	Beth Israel, Boston	Medicine
Boulware, James R., 3d.	Duke, Durham, N. C.	Pediatrics
Bray, George A., Jr.	Johns Hopkins, Baltimore, Md.	Medicine
Brief, Donald K.	Peter Bent Brigham, Boston	Surgery
Brunsting, Carl D.	Los Angeles County, Los Angeles, Calif.	Rotating
Busfield, Bernard L.	Presbyterian, New York City	Medicine
Claes, Daniel J.	U. of California, Los Angeles, Calif.	Medicine
Cox, William H.	University, Cleveland, Ohio	Medicine
Crowe, John M.	Peter Bent Brigham, Boston	Surgery
Crum, Albert B.	Bellevue (I Div.-Columbia U.), New York City	Mixed
Curtis, Lon E.	Peter Bent Brigham, Boston	Surgery
Daniels, Charles W.	U. of Chicago Clinics, Chicago, Ill.	Rotating
Davis, Brack	Stanford University, San Francisco, Calif.	Surgery
Deykin, Daniel	Massachusetts General, Boston	Medicine
Dickerson, Donald E.	Bellevue (II Div.-Cornell U.), New York City	Medicine
Ditmore, Dan A.	Pennsylvania, Philadelphia, Pa.	Rotating
Elovitz, Maurice J.	Boston City (Harvard Service), Boston	Surgery
Engle, Ralph P.	North Carolina Memorial, Chapel Hill, N. C.	Medicine
Fairfax, Charles W., 2d	Duke, Durham, N. C.	Medicine
Farrell, Thomas E.	U. S. Army, Letterman, San Francisco, Calif.	Rotating
Fenster, L. Frederick	Grace-New Haven Community, New Haven, Conn.	Medicine
Finlayson, Norris B.	U. of California, San Francisco, Calif.	Rotating



<i>Name</i>	<i>Hospital (and location)</i>	<i>Service</i>
Folkman, Moses J.	Massachusetts General, Boston	Surgery
Freiberg, Richard A.	Cincinnati General, Cincinnati, Ohio	Rotating
Friedland, Stephen L.	University, Columbus, Ohio	Rotating
Galicich, Joseph H., Jr.	U. of Minnesota, Minneapolis, Minn.	Surgery
Gay, F. James, Jr.	Los Angeles County, Los Angeles, Calif.	Rotating
Gergen, John A.	Duke, Durham, N. C.	Medicine
Gill, Thomas J., 3d.	Peter Bent Brigham, Boston	Pathology
Gilson, Benjamin J.	Mary Hitchcock Memorial, Hanover, N. H.	Rotating
Gornel, Daniel L.	Boston City (Harvard Service), Boston	Medicine
Gray, Daniel F.	Mary Hitchcock Memorial, Hanover, N. H.	Rotating
Grayzel, Arthur I.	U. of Chicago Clinics, Chicago, Ill.	Rotating
Green, Gareth M.	King County, Seattle, Wash.	Medicine
Greenough, William B.	Presbyterian, New York City	Medicine
Greganti, Frank P.	Michael Reese, Chicago, Ill.	Rotating
Hall, M-Francoise P. (Mrs.)	Royal Victoria, Montreal, Canada	Rotating
Hall, Thomas L.	Royal Victoria, Montreal, Canada	Rotating
Harrod, David B.	U. of Minnesota, Minneapolis, Minn.	Surgery
Harrod, Emma K. (Mrs.)	No Internship	
Hartzell, Harry E., Jr.	Boston City (Harvard Service), Boston	Medicine
Hellman, Dorothea W. (Mrs.)	Beth Israel, Boston	Medicine
Hellman, Emanuel S.	Boston City (Harvard Service), Boston	Medicine
Herrera-Acena, Manuel G.	Peter Bent Brigham, Boston	Medicine
Herrman, John B.	Massachusetts General, Boston	Surgery
Hill, George J., 2d.	New York Hospital, New York City	Surgery
Hinckley, Ralph H.	Pennsylvania, Philadelphia, Pa.	Rotating
Holmes, David M.	North Carolina Memorial, Chapel Hill, N. C.	Medicine
Horton, Edward S.	Johns Hopkins, Baltimore, Md.	Surgery
Hosford, Richard G.	Barnes, St. Louis, Mo.	Medicine
Hudnut, Herbert B., Jr.	Mary Imogene Bassett, Cooperstown, N. Y.	Medicine
Huttenlocher, Peter R.	Peter Bent Brigham, Boston	Medicine
Jackson, A. Charlotte	Colorado General, Denver, Colo.	Rotating
Josimovich, John B.	Boston City (Harvard Service), Boston	Surgery
Karchner, Mark M.	Massachusetts General, Boston	Surgery
Kieger, Edward F.	City Hospital, Cleveland, Ohio	Rotating
Kroll, Kenneth M.	Los Angeles County, Los Angeles, Calif.	Rotating
Krooth, Robert S.	Salt Lake County General, Salt Lake City, Utah	Medicine
LaCasce, Joseph H.	Maine General, Portland, Maine	Rotating
Layzer, Robert B.	Massachusetts General, Boston	Medicine
Lee, Ting D., Jr.	Johns Hopkins, Baltimore, Md.	Medicine
Leith, David E.	Colorado General, Denver, Colo.	Rotating
Lewis, John L., Jr.	Massachusetts General, Boston	Surgery
Linfoot, John A.	Salt Lake County General, Salt Lake City, Utah	Medicine
Lupien, Gordon F.	Boston City (Harvard Service), Boston	Surgery
Lynch, Mark E.	Hartford, Hartford, Conn.	Rotating
Markette, James R.	Denver General, Denver, Colo.	Rotating
Marshall, David C.	Mary Hitchcock Memorial, Hanover, N. H.	Rotating
McCusker, James J.	University, Ann Arbor, Mich.	Rotating
McFee, Arthur S.	U. of Minnesota, Minneapolis, Minn.	Surgery
McIntyre, Oswald R.	U. of Pennsylvania, Philadelphia, Penn.	Rotating
McKee, William D.	Stanford University, San Francisco, Calif.	Medicine
McNay, John L.	Boston City (Harvard Service), Boston	Medicine
Milde, Paul A.	Stanford University, San Francisco, Calif.	Surgery
Miller, Abbott R.	Boston City (Harvard Service), Boston	Medicine
Mohr, George C.	University, Ann Arbor, Mich.	Rotating
Morris, Roger H.	Stanford University, San Francisco, Calif.	Medicine
Moss, Arthur J.	Massachusetts General, Boston	Medicine
Mossman, Robert G.	Virginia Mason, Seattle, Wash.	Rotating
Mueller, Gustave C. E.	Massachusetts General, Boston	Surgery
Neri, M. Philip	Syracuse Medical Center, Syracuse, N. Y.	Mixed
Norkin, Stanislav	Boston City, Boston	Pathology
Norton, Richard A.	Grace-New Haven Community, New Haven, Conn.	Medicine
O'Connor, Daniel J., Jr.	Hartford Hospital, Hartford, Conn.	Rotating
Okezie, Okogbue	Rhode Island, Providence, R. I.	Rotating
Oliver, G. Charles, Jr.	Stanford University, San Francisco, Calif.	Medicine
Oncal, Robert M.	University, Ann Arbor, Mich.	Rotating
Onken, Henry D.	Barnes, St. Louis, Mo.	Surgery
Palmer, Robert H.	Pennsylvania, Philadelphia, Pa.	Rotating
Parker, John W.	U. of California, San Francisco, Calif.	Medicine
Parks, William S.	San Francisco (Stanford Service)	Rotating
Perrin, Jane S. (Mrs.)	Children's Medical Center, Boston	Pediatrics
Pierce, Donald S.	University Hospitals, Cleveland, Ohio	Surgery
Pulerwitz, Leonard	U. of Chicago Clinics, Chicago, Ill.	Rotating
Remensnyder, John P., Jr.	Massachusetts General, Boston	Surgery
Retzlaff, John	King County, Seattle, Wash.	Rotating
Rivers, Robert J., Jr.	Strong Memorial, Rochester, N. Y.	Surgery



<i>Name</i>	<i>Hospital (and location)</i>	<i>Service</i>
Robertson, Ralph D.	Stanford University, San Francisco, Calif.	Surgery
Rockett, Francis X.	Boston City (Tufts Service), Boston	Surgery
Rubenstein, Howard S.	Los Angeles County, Los Angeles, Calif.	Rotating
Saechew, Suilam	U. of Minnesota, Minneapolis, Minn.	Rotating
Schneiderman, Lawrence J.	Boston City, Boston	Pathology
Schotland, Donald L.	U. of Illinois Research and Educational, Chicago, Ill.	Rotating
Schotland, Marilyn G. (Mrs.)	U. of Illinois Research and Educational, Chicago, Ill.	Rotating
Senger, Harry L., Jr.	U. of Illinois Research and Educational, Chicago, Ill.	Rotating
Shapiro, Sandor S.	Boston City (Harvard Service), Boston	Medicine
Sidel, Victor W.	Peter Bent Brigham, Boston	Medicine
Silbert, Jeremiah E.	Barnes, St. Louis, Mo.	Medicine
Silver, Randall H.	Mary Imogene Bassett, Cooperstown, N. Y.	Rotating
Simmons, Richard J.	Peter Bent Brigham, Boston	Medicine
Singleton, John W.	Massachusetts General, Boston	Medicine
Smith, George V.	Charity Hospital, New Orleans, La.	Rotating
Smith, Norman T.	Children's Medical Center, Boston	Pediatrics
Smith, Sumner A.	Boston City (Harvard Service), Boston	Medicine
Snell, John E.	Peter Bent Brigham, Boston	Medicine
Stern, Adolph	Lenox Hill, New York City	Rotating
Sullivan, Philip R.	U. S. Public Health, Baltimore, Md.	Mixed
Sutherland, Donald W.	Massachusetts General, Boston	Medicine
Tannenbaum, Charles S.	Barnes, St. Louis, Mo.	Surgery
Tashjian, Armen H., Jr.	Boston City (Harvard Service), Boston	Medicine
Tepper, Lloyd B.	U. of California, San Francisco, Calif.	Medicine
Todd, James S.	Presbyterian, New York City	Surgery
Van Buskirk, David	Massachusetts General, Boston	Medicine
von Hippel, Arndt R.	Boston City (Harvard Service), Boston	Surgery
Wagman, Richard J.	Peter Bent Brigham, Boston	Medicine
Wang, Shen-Kuang	Massachusetts General, Boston	Orthopedics
Washburn, Thomas C.	North Carolina Memorial, Chapel Hill, N. C.	Medicine
Weber, George S.	Boston City (Harvard Service), Boston	Surgery
Weiser, Frank M.	Boston City (Harvard Service), Boston	Medicine
Widrow, Sidney H.	Beth Israel, Boston	Medicine
Wilkie, George H.	Royal Victoria, Montreal, Canada	Rotating
Williams, G. Melville	Massachusetts General, Boston	Surgery
Wolff, Anna K.	Beth Israel, Boston	Medicine
Wolff, Carl T.	Massachusetts General, Boston	Medicine
Wylie, Harold W.	Mary Imogene Bassett, Cooperstown, N. Y.	Rotating
Yamaguchi, Donald M.	U. of Minnesota, Minneapolis, Minn.	Rotating
Yeoh, Chin B.	Roosevelt, New York City	Mixed
Yurchak, Peter M.	Massachusetts General, Boston	Medicine

The “Tranquil” Isles

(With Apologies to Edward Lear and Broad Use of Poetic License)

A lion, a bear, a tiger and fox
Had a meeting of minds one day
They'd heard others say
In a relaxed sort of way
“Take a pill or take two to recover.”
They agreed that the strife of their active life
Caused fatigue and an abnormal tenseness,
So they sought to find smiles in the Sarpasil Isles
And change their time-honored pretenses.

Oh, many and more; many and more
Are the lands where these soothing herbs bloom.
They may make you relaxed and a bit of a bore,
But you're not in the swim unless you give in,
And partake of the “tranquillize” boom.

A lion, a bear, a tiger and fox
Had this meeting of minds one day,
So they sailed through the Pharmacopeia Seas
In quest of an island all covered with trees
And they brought a white mouse, a collapsible house,
A hen and four lady-bug bees.
(The mouse was a servant to keep them in style,
The hen was to eat, and the bees flew away in a while.)
They came close to grief as they skirted the reef
That juts out from the Zimbli Zowse.

Oh, many and more; many and more
Are the lands where these soothing herbs bloom.
They may make you relaxed and a bit of a bore,
But you're not in the swim unless you give in,
And partake of the “tranquillize” boom.

The lion, the bear, the tiger and fox
Had a conflict of minds those days.
The noise of their growls were lost in the howls
Of the gales of the Southern Grenden
(The mouse and the hen were tied in a pen
But kept healthy on Camembert cheese.)
When they sighted the isles they were wreathed in smiles
As they thought of the leisure ahead.



They embarked on the shore and then with a roar
 Took off for the center of Maltown.
 There in the shade of a Reserpone glade
 They gorged on the fruit of these trees,
 They gorged on the fruit of these trees.

Oh, many and more; many and more
 Are the lands where these soothing herbs bloom.
 They may make you relaxed and a bit of a bore,
 But you're not in the swim unless you give in,
 And partake of the "tranquillize" boom.

The lion, the bear, the tiger and fox
 Had complete melting of minds those days.
 They maintained a level of somnolent calm,
 By lunching only on Atarix Balm.
 At rare events, when their minds became keen,
 They throttled them down with some Dorideen,
 Thorazone, Compazone, Plucidyl pies,
 Sarpasil, Equinal and Frinqual fries.
 They gorged themselves with Barbitol soups,
 And calmed their nerves with Valymud stupes
 Until all four lay down to sleep, to sleep,
 Until all lay down to sleep.

Oh, many and more; many and more
 Are the lands where these soothing herbs bloom.
 They may make you relaxed and a bit of a bore,
 But you're not in the swim unless you give in,
 And partake of the "tranquillize" boom.

The lion, the bear, the tiger and fox
 Lost control of themselves and their minds.
 And in two short years, they all had changed,
 In two short years or more.

How listless and still, how relaxed their smiles,
 Were these once proud beasts of the kingdom.
 For they'd crossed the divide, and filled their hides
 With the herbs of the Sarpasil Isles.
 It was then that the mouse (who had lived like a louse,
 Though content to eat only his cheese)
 Saw their change in demeanor, in action and drive,
 And saw it was *his* time to rise up alive.

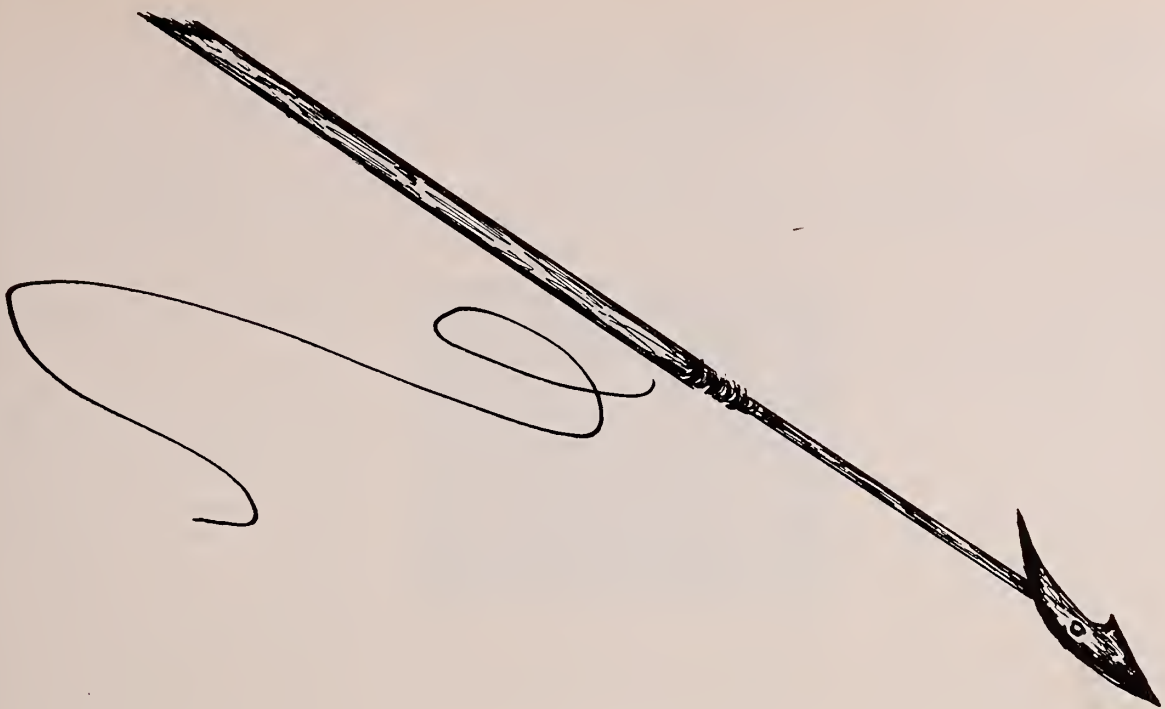
Oh, many and more; many and more
 Are the lands where these soothing herbs bloom.
 They may make you relaxed and a bit of a bore,
 But you're not in the swim unless you give in,
 And partake of the "tranquillize" boom.

The lion, the bear, the tiger and fox
 Lost control of themselves and their minds.
 They say a white mouse is lord in their house
 And orders them this way and that.
 He holds tight to the keys and eats only of cheese
 To avoid the collapse of his mind.
 They say if you travel to Sarpasil Isles,
 You'll be met by a wonderful sight,
 Of a mouse who is king and a mouse who is queen
 And a sound that rings clear through the night.
 It's the groans and the moans in the Valley of Ghoans
 Of those four who are deep in their slumber.
 And it's wise to refuse, to give in to the ruse,
 Or you'll soon be one of their number.

Oh, many and more; many and more
 Are the lands where these soothing herbs bloom.
 They may make you relaxed and a bit of a bore,
 But you're not in the swim unless you give in,
 And partake of the "tranquillize" boom.

J. R. B.





Melville Harpoons a Doctor

Craig Billings Leman '52

Medicine and its practitioners have never been free from the fire of the laity. Doctors have drawn the attention and satire of many writers. Not all our literary portraits have been flattering.

Geoffrey Chaucer in *The Canterbury Tales* lightly chided the doctor for his collusion with druggists; and for his ironic love of gold, "... for gold in phisik is a cordial." In Elizabethan and Restoration drama can be found examples of the satirical treatment of doctors. Across the Channel the great French dramatist Moliere contributed his share of such humor (*Le Médecin Malgré Lui*, *Le Malade Imaginaire*, etc.)

In our modern day more and perhaps less subtle satire often comes our way. We fared relatively well at the hands of Sinclair Lewis a generation ago, although *Arrowsmith* upset many physicians including Harvey Cushing, who tried to take Lewis to task for some of his

distortions. In *Not as a Stranger*, a gargantuan Kinseyesque indictment of our profession, Morton Thompson painted a group of leprous portraits of psychopathic physicians. We had company, for in this grotesque book nurses, patients and even domestic animals were equally disturbed. In *The Citadel*, A. J. Cronin described the nefarious and apparently extant practice of ghost surgery, touching even on famed Harley Street. In *Kings Row*, by Henry Bellamann, a sadistic surgeon performs an unnecessary amputation on an unconscious victim. Here is reached a pinnacle of medical unsavoriness that seems unreal.

If these authors drew us unkindly, a greater American novelist named Herman Melville drew and quartered us.

White Jacket—The World in a Man-of-War was published in 1850, a year before *Moby Dick*. Even

more than Melville's masterpiece, this novel was founded on personal experience during his South Seas odyssey. In his own words, his object was "... by illustrative scenes to paint general life in the Navy."

Melville's tour as a sailor aboard the warship *United States* began in 1843, when he was 24. Three years earlier he had sailed on the New Bedford whaler *Acushnet* to reach the sperm whaling grounds, deserted in the Marquesa Islands to spend four months as virtual prisoner of a tribe of cannibals, and escaped to pursue a roving course across the Pacific. During a voyage on another whaler and a sojourn at Tahiti, his closest friend was an eccentric, worldly physician who appears in another novel as Dr. Long Ghost. Long Ghost may have been the only doctor he knew intimately up to the time he wrote *White Jacket*.

After knocking about the Pacific from the Sea of Japan (the site of

the Pequod's final rendezvous with *Moby Dick*) to Hawaii, Melville had had enough of the adventure he sought. Arduous duty in the rigging and on the decks of a warship of our navy was the price he paid for passage home around Cape Horn. It was to be more than a year before he would land in Boston.

In a sense his vigorous picturesque narrative of the voyage did for the Navy what Richard Henry Dana had done for the Merchant Marine with *Two Years Before the Mast*. Through *White Jacket* there runs a vein of irony underscoring the harsh authoritarianism of navy life. Ruthlessly he assailed the Navy's punitive system. Flogging he described so mercilessly that an uproar in Congress led to abolition of this punishment. While he directly attacked flogging and keelhauling, the most brilliant and subtle satire in the work adorns an account of a surgical operation aboard ship.

Melville introduces the Surgeon of the Fleet, Dr. Cadwallader Cuticle. A repellent individual, Cuticle is an old man with a glass eye, a wig and false teeth, all of which he removes just prior to wielding his scalpel, his spittle presumably still moistening his hands. Melville lampoons his professed devotion to both humanity and science by contrasting his indifference to the suffering of his patients with his attachment to his collection of pathological specimens.

Provided with an opportunity to perform his first major operation in three years of sea duty, Cuticle eagerly summons his junior colleagues from other ships of the squadron to a consultation. He presents the moribund patient, states his opinion that only an amputation through the thigh can save him, swears his reluctance to operate, and then becomes enraged as the other surgeons one by one tactfully vote against amputation. Cleverly he seizes a confused fawning appraisal by the youngest man present as agreement and closes this parody of a consultation by inviting his colleagues to watch the procedure.

At the grisly scene of the amputation, the suddenly nostalgic Cuticle sentimentally recalls his student days, his love of surgery, and his annoyance at his prolonged surgical inactivity caused by a state of peace. As the terrified patient is brought in and strapped to the table, Cuticle caresses his instruments and demonstrates his plan of attack on the patient and on a skeleton hanging above him. The patient faints; Cuticle waits for him to revive. Throughout he fences with and ridicules the pedantic comments of a younger surgeon in the audience. At last he falls upon and severs the injured leg while his fellows time him with their watches. As the vessels are ligated, the stump sutured and the patient is carried away, he pompously lectures his bored colleagues. When word comes that the patient is dead, Cuticle, undaunted, recalls his own prediction that the operation might be fatal and calmly invites his colleagues back on the morrow to witness his dissection of the amputated leg.

At the time of Melville's voyage, anesthesia was still to be developed, and Lister was a boy of 16. Amputation had such a dreadful reputation with the public that his gruesome account of the procedure itself probably created less stir among his readers than his vitriolic portrayal of the man who did it.

The episode has much in common with Gustav Flaubert's famous description in *Madame Bovary* of a disastrous operation on club foot, resulting in sepsis and amputation. Although *White Jacket* was published the year Flaubert began work on his classic, it is doubtful that the French novelist ran across the American work.

Whereas Flaubert's blundering surgeon was a hopelessly inept but well-meaning country doctor who was the tool of a scheming pharmacist, Melville cast his harpoon at a lofty respected leader of the surgical profession. Melville spares us no gory detail, but Flaubert has the amputation done offstage, so to speak, and we suffer with the

Bovarys, as they hear the screams of the unfortunate patient.

Flaubert was the son of a doctor. The only page of his intricate, close-knit novel that does not integrate with the rest is an irrelevant encomium to a physician, a man who bears no relation to the plot, who is described with reverence. Flaubert was indeed paying homage to his father.

The grim implacable Captain Ahab of *Moby Dick* lost a leg at sea, bitten off by his monstrous antagonist; Melville hints at the horror of his resulting illness and convalescence. Over and over Melville implies that Ahab emerged a changed man, his soul forever damaged by his physical loss. It is easy to believe that an incident such as he described in *White Jacket* was seared in Melville's memory, enabling him to conceive his marvelous creation of the unforgettable character of Captain Ahab, strong, courageous, bearing to his watery grave the physical and spiritual scars of his hideous mutilation by *Moby Dick*.

ALUMNI SOCIAL HOUR DURING THE ANNUAL MEETING OF THE A.M.A.

As in the past, the Harvard Medical Alumni Association will sponsor a party for all Harvard Medical School graduates who are attending the annual meeting of the American Medical Association. This year the A.M.A. meets in New York June 3-7. Thanks to the efforts of Russel H. Patterson, '18, President-elect of the Association, Claude E. Forkner, '26, of the H.M.A.A. Council, and Otto E. Billo, '35, Secretary-Treasurer of the Harvard Medical Alumni of New York, arrangements have been made for a social hour at the Harvard Club of New York, 27 West 44th Street, on Thursday, June 6, 1957, from 5-7 p.m. Refreshments will be available on a "pay as you go" basis. Thomas H. Lanman, '16, Director of Alumni Relations, will be there to greet you. All Alumni of the Medical School and their wives are most cordially invited.



HONORS



The American Academy of Microbiology has recently invited Dr. George P. Berry, Dean of the Faculty of Medicine, to become a charter fellow of the Academy. Three other members of the Faculty have also been invited to become charter fellows—Albert H. Coons, '37, visiting professor of bacteriology and immunology; Monroe D. Eaton, '30, associate professor of bacteriology and immunology; and John H. Hanks, Ph.D., lecturer on bacteriology and immunology.

The Academy is to be made up of well-qualified microbiologists in all branches of the science throughout the United States and Canada, and the purposes of the organization are:



Jerome S. Leopold, '06 (right) chats with classmate Charles G. Mixter at their 50th Reunion last year.

to promote the highest professional standing of microbiologists; to carry on professional activities on behalf of the science of microbiology; and

to promote programs of recognition, certification and accreditation of microbiologists where needed to accomplish the above purposes.

* * *

A resolution has recently been adopted by the medical board of the Lenox Hill Hospital in New York City naming the hospital library after Jerome S. Leopold, '06. Dr. Leopold, who has served for 45 years in the hospital's Abraham Jacobi Division for Children, was cited for his knowledge and skill as a teacher, his inspiration to young physicians to devote themselves to the study and practice of pediatrics, and for his numerous contributions to the pediatric literature.

Theocalcin

brand of theobromine-calcium salicylate

For continuous, mild Cardiotonic and Diuretic Therapy

- for myocardial stimulation
- to diminish dyspnea
- to reduce edema

Prescribe THEOCALCIN — Start with 2 or 3 tablets 3 times a day and reduce the dose as improvement is obtained. Eventually the patient may be kept comfortable on a small maintenance dose of 1 or 2 tablets a day, several times a week.

Theocalcin®, a product of E. Bilhuber, Inc.

BILHUBER-KNOLL CORP. *distributor*

**ORANGE
NEW JERSEY**

Alumni Day

RAIN OR SHINE

THURSDAY, MAY 30, 1957

Registration

Begins at 9:00 a.m.

Building A, Harvard Medical School

Annual Business Meeting of the Alumni Association

9:30 a.m.

Alumni Day Symposia

10:00-12:00 noon

Amphitheatre D, Harvard Medical School

Frank B. Cutts

President of the Class of 1932

George Packer Berry

Dean, Harvard Medical School

Nathan M. Pusey

President, the University

12:00-12:30 p.m.

Buffet Luncheon

The Quadrangle, Harvard Medical School (*All Alumni are guests of the Association*)

Tour of the Biophysical Laboratory,

Arthur K. Solomon, Director

2:00 p.m.

SPEAKERS at the SYMPOSIA

CHARLES A. JANEWAY—*Thomas Morgan Rotch Professor of Pediatrics*

"A PEDIATRICIAN LOOKS AT MEDICINE IN ASIA AND THE NEAR EAST"

J. ROSWELL GALLAGHER—*Assistant Clinical Professor of Pediatrics*

"THE MEDICAL CARE OF ADOLESCENTS"

ARTHUR K. SOLOMON—*Assistant Professor of Physiological Chemistry*

"THE MISSION OF THE BIOPHYSICAL LABORATORY"

THOMAS B. QUIGLEY—*Assistant Clinical Professor of Surgery*

"THE CARE AND FEEDING OF INJURED ATHLETES AND COACHES"

FREDERICK A. COLLIER—*Professor of Surgery and Chairman of the Department, University of Michigan Medical School*

"WHO DOES OPERATIONS?"

ALUMNI DAY COMMITTEE

FRANC D. INGRAHAM, *Chairman*

GEORGE P. BERRY

THOMAS H. LANMAN

JOHN ROCK, *Moderator*

Class Day

Friday, May 31, 1957

Class Day Exercises for the Class of 1957

The Quadrangle 10:30 a.m.

A feature of the Exercises will be the presentation of the Alumni Prize

Class Day Luncheon

The Quadrangle 12:00 noon

(All Alumni and their wives are guests of the School)

Any Plans For Your Daughter?

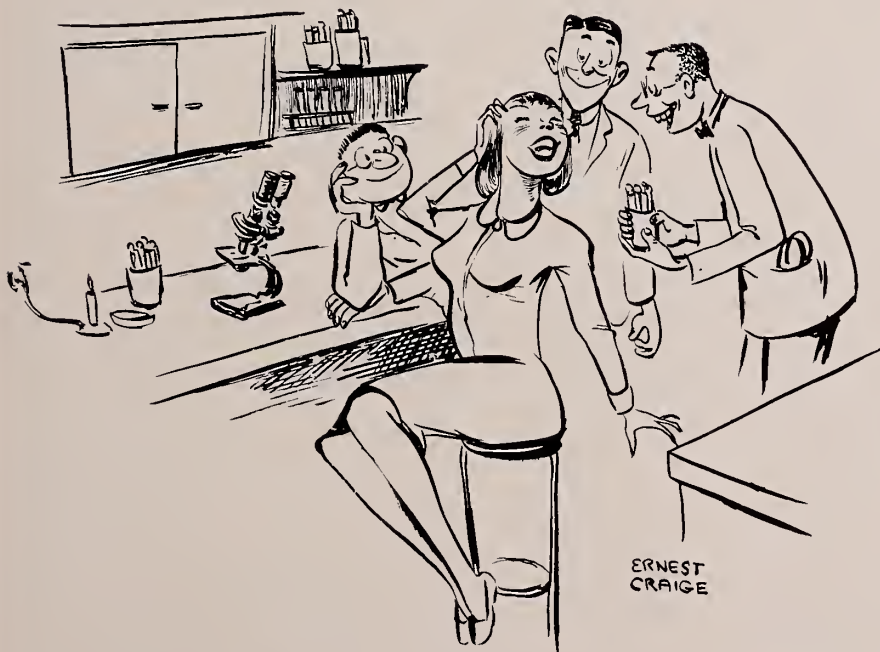
(A Message to the Alumni
from the Harvard Medical Area Personnel Office)

Have you ever thought of sending your daughter to Harvard—where she will get a pay check—better than Dad ever received here?

The Harvard School of Public Health, Harvard School of Dental Medicine, Harvard Medical School and its affiliated hospitals are searching for bright young offspring of bright parents to help staff research laboratories. The only requirement is a B.S. or a B.A. degree with chemistry and biology. At the moment there are about 200 young college graduates acting as research assistants, and in addition attending seminars and auditing courses, plus getting 10 paid holidays off and four weeks' paid vacation. (It is rumored that the Personnel Office brags about the record number of marriages between employees and graduate students—even the busy, harassed medical student has been known to be distracted by the glamour he meets in the hospital corridors, not to mention in the H.M.S. tunnel.)

For those not planning a career in the basic sciences there are opportunities in the administrative offices of the schools and hospitals where intelligence and good typing are all the qualifications necessary. (Shorthand is helpful too, even in this age of electronics.) Most openings occur in July or September, but applications can be made at any time.

If your daughter is in college now, her placement director will be able to tell her all about opportunities at Harvard. In addition, Mrs. Marcia Kinslow, Personnel Officer of the Harvard Medical Area, canvasses the colleges every year, and would be delighted to talk with any undergraduate who is interested in coming to Harvard. Your daughter can sign up for an interview or write to Mrs. Kinslow at 25 Shattuck Street, Boston 15, Massachusetts. (Incidentally, the Personnel Office can help with housing. There are some part-time jobs available from time to time, either in an office or in a laboratory.)



The Inquisitive Physician

THE LIFE AND TIMES
OF
GEORGE RICHARDS MINOT
M.D.

By FRANCIS M. RACKEMANN, M.D.

NOBEL PRIZE winner George Richards Minot was one of the Harvard Medical School's most distinguished alumni, and his remarkable influence on younger men while he was Director of the Thorndike Memorial Laboratory reaches around the world today.

THIS BIOGRAPHY reveals a man of enormous energy, acute intellectual curiosity, deep humanity, great achievements. It tells a story of adversity and triumph: there is Dr. Minot's last-minute rescue (by the discovery of insulin) from death by diabetes; and his own discovery—with Dr. William P. Murphy and Dr. George H. Whipple—of the nature and treatment of pernicious anemia. Moreover, the book records some of the quite revolutionary developments in the field of medicine—and gives a vivid picture of the Boston medical community—over the past fifty years.

EVERY READER of the *Harvard Medical Alumni Bulletin* will want to read this admirable biography.

\$5.00 at your bookstore, or from

HARVARD UNIVERSITY PRESS
79 Garden St., Cambridge 38, Mass.

NECROLOGY

1896

FRANK LESTER PLEADWELL died at Honolulu, Hawaii, January 30, 1957.

1901

NATHANIEL POPE BREED died at Lynn, Massachusetts, December 20, 1956.

1903

GEORGE EDWIN DEERING died at Worcester, Massachusetts, December 31, 1956.

1905

RICHARD DEXTER died at South Natick, Massachusetts, January 19, 1957.

WYMAN WHITTEMORE died at Boston, Massachusetts, January 24, 1957.

1906

C. BYAM HOLLINGS died at Concord, New Hampshire, January 25, 1957.

1909

RALPH WAITE DENNEN died at Rockland, Maine, January 15, 1957.

REVERDY MORRIS HALL, JR. died

at Madison, Wisconsin, November 25, 1956.

1911

FLOYD ORTON REED died at Yonkers, New York, February 16, 1957.

1912

EARLE EDWIN FARNSWORTH died at Grand Island, Nebraska, December 31, 1956.

1913

EDWARD BANCROFT TOWNE died at Palo Alto, California, January 13, 1957.

1914

FRANK ARTHUR BOWES died at West Haven, Connecticut, February 24, 1957.

1916

HARRY ARCHIBALD NISSEN died at Sherborn, Massachusetts, December 14, 1956.

JOHN HERBERT WAITE died at Winchester, Massachusetts, February 23, 1957.

1922

DOUGLAS BOYD died at Highland Park, Illinois, December 21, 1956.

1923

SAMUEL MUFSON died at Biloxi, Mississippi, January 14, 1957.

1924

GEORGE VICTOR BURTON died at Yarmouth, Nova Scotia, Canada, November 28, 1956.

DONALD CHARLES HOUGHTON died at Rochester, New York, November 5, 1956.

1927

JOHN MOLLOY FLYNN died at Belmont, Massachusetts, December 11, 1956.

1932

JAMES ALBERT ATKINS died at Columbia, Missouri, December 19, 1956.

1940

ORAL HENRY STONE died at Cleveland, Ohio, November 18, 1956.

ALUMNI NOTES

1896

Frank Lester Pleadwell, Captain, United States Navy (Ret.), died in Honolulu, Hawaii, on January 30, 1957. Captain Pleadwell, who had lived in Honolulu for the past 25 years, joined the Navy as an assistant surgeon in 1896, and served on the *Nashville* during the Spanish-American War. A graduate of the Naval War College in 1920, he served as British services special observer in 1916-17; subsequently he was assistant naval attaché at the American Embassy in London and aide on the staff of the commander-in-chief of U. S. Naval forces in European waters. He held the post of fleet surgeon and aide on the staff of the Atlantic Fleet in 1920-21, after which he became associated with the Bureau of Medicine and Surgery in Washington, D. C. Captain Pleadwell commanded the naval hospitals at Pearl Harbor, Hawaii (1925-28) and Boston (1928-29). He was awarded a bronze medal for services at Cienfuegos in the Spanish-American War and was recommended by Admiral Sims for the Navy Cross in World War I; in addition, he received a certificate of commendation and was a Commander of the British Empire. A delegate of the U. S. Navy at international congresses in Paris and London in 1909, he was a technical adviser to the American delegation at Geneva in July 1929, and chairman of the American delegation to the XI International Congress of

the History of Medicine in Yugoslavia in 1938. Captain Pleadwell was editor (with Professor T. O. Mabbott) of *The Life and Works of Edward Coote Pinkney* (1925) and *The Life and Works of Joseph Rodman Drake* (1935). He is survived by his second wife, the former Laura Mell Stith, whom he married in 1931; and a daughter by his first marriage, Theodora Hunt.

1901

Nathaniel P. Breed died at his home in Lynn, Massachusetts, on December 20, 1956. Dr. Breed, who served as medical examiner for the Lynn district from 1919 until 1943, was chief surgeon at Lynn Hospital prior to his retirement in 1948. He was also a founder of the Lynn Hospital tumor clinic and was chairman of the Lynn School Committee from 1919 to 1921. A native of Lynn, Dr. Breed graduated from Harvard College in 1898 and interned at Lynn Hospital. He served overseas in World War I with the Army Medical Corps, rising to the rank of lieutenant colonel. Dr. Breed was a past president of the Massachusetts Medical Legal Association and a member of the Essex South Medical Society. He leaves his widow, the former Mabel Ladd; two sons, Dr. Robert T. of Lynn and N. Preston of Belmont, Massachusetts; and a stepdaughter, Mrs. Ellen Perrin of Columbiana, Ohio.

1903

George Edwin Deering died at Worcester, Massachusetts on December 31, 1956.

1904

Harry M. Page, noting that "senescence has some compensations," reports three recent citations: life membership in the Oregon State Medical Society; life membership in the American Medical Association; and life membership issued by the Oregon State Board of Medical Examiners on the golden anniversary of his licensure, January 10, 1907. He adds, "Senescence must mean not only length of life, but also breadth, thickness, the fourth dimension and the search for the Master Word—Truth."

1905

Richard Dexter died at South Natick, Massachusetts, on January 19, 1957. Survivors include a son, Richard Dexter, Jr. of Euclid, Ohio, and a daughter, Mrs. John Montigney of Windsor, Connecticut.

George C. Shattuck has been honored by the Government of Cuba. He was awarded the Decoration of the Order of Merit, "Carlos J. Finlay," in the grade of Knight Commander.

Wyman Whittemore died at Boston, Massachusetts, January 24, 1957. Dr. Whittemore, who was 77 at the time of his death, had been visiting surgeon at the Massachusetts General Hospital before re-

